Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai 400005 Tel. 022 22163964/65/69 Fax 22163976

Email: mercindia@merc.gov.in Website: www.merc.gov.in

CASE No. 127 of 2021

Case filed by Maharashtra State Power Generation Company Limited (MSPGCL) seeking approval for Change in Law claims related to Coal Tolling arrangement carried out under Case -IV Phase-I.

<u>Coram</u> Sanjay Kumar, Chairperson I.M. Bohari, Member Mukesh Khullar, Member

| Maharashtra State Power Generation Co. Ltd. (MSPC | GCL)Petitione |
|--|---|
| V/s | |
| Maharashtra State Electricity Distribution Company | Limited. (MSEDCL) Respondent |
| Dhariwal Infrastructure Ltd. (DIL) | Impleaded Respondent |
| Appearance | |
| For the Petitioner | : Shri Ramandeep singh, Rep. : Shri P.K. Kotecha, CE, MSPGCL |
| For the Respondent | : Adv. Ravi Prakash, MSEDCL |
| For Impleaded Respondent: | : Adv. Deepa Chawan, DIL |
| | |

ORDER

Date: 21 July, 2022

1. Maharashtra State Power Generation Company Limited (MSPGCL) has filed the Petition being Case No. 127 of 2021, on 17 September, 2021 seeking approval for Change in Law claims related to Coal Tolling arrangement carried out under Case -IV Phase-I.

2. Main Prayers of MSPGCL are as follows:

"

- 1. Admit the Petition as per the provisions of the Regulation 32 of the Maharashtra Electricity Regulatory Commission (Conduct of Business) Regulations 2004;
- 2. Allow Petitioner to recover the amount of change in law under coal tolling arrangement from MSEDCL through FAC mechanism.
- 3. Condone any error/omission and to give opportunity to rectify the same;
- 4. Permit the Petitioner to make further submissions, addition and alteration to this Petition as may be necessary from time to time......"

3. MSPGCL in its Petition has stated as under:

- 3.1 The Central Electricity Authority (CEA) vide its Notification dated 8 June, 2016, envisaged following five types for allowing flexibility of utilization of coal:
 - Case-1: Use of Coal aggregated with the State in its own State Generating Stations
 - Case-2: Use of Coal aggregated within one State in Generating Stations of other state's utilities
 - Case-3: Use of Coal aggregated with State in Central Generating Stations and vice versa
 - <u>Case-4: Use of Coal by any State/ Central generating company inPrivate Generating Stations (IPPs)</u>
 - Case-5: Use of coal assigned to the Central Generating Company in their own plants or any other more efficient plants.
- 3.2 The Guidelines for Case IV type bidding were issued by CEA on 20 February, 2017. The Government of Maharashtra (GoM) vide Government Resolution (GR) dated 15 May, 2017 appointed MSPGCL as State Notified Agency. Accordingly, MSPGCL floated tender for purchase of 400 MW power on short term basis from Independent Power Plants (IPP) considering the use of coal from Western Coal Field Limited (WCL) mines.
- 3.3 After following E-tendering process, MSPGCL issued Letter of Award (LoA) to a) M/s Dhariwal Infrastructure Ltd for 185 MW against one Unit of Nashik Thermal Power Plant and b) M/s Ideal Energy Projects Ltd. for 215MW against Bhusawal Thermal Power Plant Unit No. 3, on 20 December, 2017.
- 3.4 As per terms of the Detailed Procedure Agreement (DPA) for Coal Tolling arrangement, all of the existing coal price, taxes and duties prevailing at the time of submission of the Bid shall be paid by Seller and any increase in price of coal, duties and taxes during the contract period needs to be borne by MSPGCL and to be passed on to MSEDCL for recovery under FAC mechanism or as additional claim in truing up process.

- 3.5 Accordingly, MSPGCL in its Multi Year Tariff (MYT) Petition in Case No. 296 of 2019 had raised the issue of additional coal costs borne by MSPGCL on account of "Change in Law" which is to be passed on to MSEDCL with reference to the Coal tolling arrangement carried out during FY 2018-19. The Commission had issued MYT Order on 30 March, 2020 and on the aforesaid issue, it had directed MSPGCL to approach separately for approval of the Change in Law claims for coal tolling arrangement.
- 3.6 After the Bid submission date i.e., 08 September 2017, there were following changes in relation to price of Coal:
 - a) Surface Transportation Charges (w.e.f. 22.11.2017),
 - b) Evacuation facility charges levied by CIL (w.e.f.19.12.2017),
 - c) Change in Basic price of coal (w.e.f. 08.01.2018),
 - d) Change in Surface Transportation Charges (w.e.f. 26.12.2018).
- 3.7 The impact of Change in Law for Case IV Phase I contract, is about Rs. 147.91 per MT for the coal procured till 23 December, 2018 and post that the impact is Rs. 157.36 per MT.
- 3.8 The final reconciliation of transactions under Phase I of the Case IV arrangement (i.e., 13th April 2018 to 13th January 2019) to M/s DIL is completed. As M/s IEPL has opted for road mode of transportation of coal and MSPGCL's contract with CIMFR for loading end coal sampling analysis was for coal at railway siding, CIMFR results of the coal transported to M/s IEPL are not available. Therefore, reconciliation of transactions with IEPL's contracts under Case IV is still pending for clarity in this regard from WCL.
- 3.9 In the present Petition, MSPGCL has submitted claim of Change in Law only related to the Contract of M/s DIL.
- 3.10 MSPGCL has submitted the impact of change in price of coal is Rs. 149.79/MT amounting to Rs. 8.47 Crores for the coal supplied to DIL. The price impact calculated is against the coal quantity billed to DIL during the contract period. In addition to the above, there is also net impact of Debit / Credit Notes of Rs. 72 Lacs.
- 3.11 As per Case IV Guidelines, the Ceiling Tariff is set to lowest of the variable cost of the generating station whose power is to be replaced by generation from IPP. Hence, the benefit envisaged in view of reduction in cost of power generating station under these guidelines is already factored in when IPP has quoted tariff below the ceiling tariff and agreement is executed at the discovered tariff rate.
- 3.12 Further, in line with the expected increase in the charges in the procurement of coal, as per Clause 5.2.8 and 10.2 of DPA, the MoD rate for the power procurement was revised from Rs. 2.76/kWh (quoted Tariff) to Rs. 2.822/kWh, based on the provisional assessment at that time that the impact of such revision in coal price will be around 6

- paise per unit. Thus, scheduling of the DIL unit during this period was done considering the possible impact of such increase in variable charge.
- 3.13 If the Case IV tolling arrangement was not implemented, such change in charges against the procurement of coal would have been borne by MSPGCL in "business as usual" case and ultimately the impact would have been passed on to the MSEDCL under FAC mechanism as per the provisions of the MYT Regulations, 2015.
- 3.14 Also, Final reconciliation of coal provided to M/s DIL under Case IV (Phase I) arrangement, vis-à-vis the energy supplied to MSEDCL is carried out and communicated to M/s DIL vide MSPGCL's letter dated 30 April, 2020. The final reconciliation is carried out considering GCV at 'Equilibrated Basis' in line with the provisions in DPA.
- 3.15 Subsequently, Amendment Notification of MoP dated 25 October, 2018 of Case IV bidding Guidelines states that "the reconciliation of coal is needed to be done on GCV at ARB basis post moisture correction". The said Amendment was issued after the signing of the agreement and hence was not applicable in this case. Therefore, reconciliation of coal for the period of Phase I of the Case -IV arrangement with DIL is calculated on GCV at equilibrated basis.
- 3.16 In the final reconciliation statement of coal supplied to DIL under Case IV (Phase I) arrangement for the period from 1st April 2018 to 13th January 2019, it is observed that a surplus coal quantity was available with DIL equivalent to 57.04 MU which is to be supplied by DIL to MSEDCL at accepted Tariff of Rs.2.76/kWh as per the provisions of Case IV Guidelines and agreement signed under Case IV arrangements. Consent was sought from MSEDCL for the same and MSEDCL has provided the consent vide letter dated 11 May, 2020.
- 3.17 DIL had supplied additional quantum of 57.04 MUs surplus energy from 12 May, 2020 to 9 June 2020. MSPGCL requested vide letter dated 24 July, 2020 for closure of the Tripartite Agreement (TPA) signed between MSPGCL, MSEDCL and DIL. In reply, MSEDCL has given conditional consent for closure of the 'TPA discharging all the parties to the agreement from all the obligations except for FAC claims limited to Rs. 8.5 Crores after the same are duly approved by the Commission under this arrangement.
- 3.18 Also, in the present case, the ceiling tariff was set at Rs. 2.80 /kWh which was the lowest variable charge amongst Nashik 210 MW Units and Bhusawal Unit No. 3. Thus, when the derived tariff (Rs. 2.76/kWh) after the tender process was below the ceiling tariff, there was benefit to the end procurer (i.e., MSEDCL) due to reduction in effective power purchase cost.
- 3.19 The coal tolling arrangement with DIL was against one of the 3 Units at Nashik TPS. The variable charge for Nashik TPS during April, 2018 to January, 2019 as per FAC computations was Rs. 3.58, 3.31, 3.33, 3.85, 3.61, 3.27, 3.05, 3.37, 3.18, 3.20 per kWh

- respectively resulting in reduction in energy charge under Case IV arrangement in the range of Rs. 0.23/kWh to Rs. 1.0364/kWh.
- 3.20 DIL has supplied 739.813 MUs of power during this period. Thus, the per unit impact of the "Change in Law" claim of Rs. 9.19 Crores (8.47 Crores + 72 Lac) is approximately 12 paise per unit. Even if the impact of the present "Change in Law" claim is added to the effective Tariff for power from DIL, it works out to Rs. 2.76 plus 0.12 i.e., Rs. 2.88 per unit. The effective tariff of Rs. 2.88 per unit is significantly lower than the variable rate for the Nashik Units.
- 3.21 Thus, the overall costs of power supplied under tolling arrangement is lower than the cost of generation from Nashik TPS which is considered for tolling.
- 3.22 This Petition is filed by MSPGCL in compliance to the directives of the Commission in Order dated 30 March, 2019 in Case No. 296 of 2019 regarding filing separate Petition for approval of the Change in Law claims for Coal tolling arrangement under Case IV Phase I.
- 3.23 Though the issue in this regard was once again raised in the Review Petition in Case No. 180 of 2020, the Commission reiterated the direction again in the Review Order dated 1 March, 2021.
- 3.24 In the Order dated 30 March, 2020, the Commission has not given any specific timeline for filing the separate Petition. However, there is an inadvertent delay in the filing the Petition.
- 3.25 MSPGCL referred to the Order dated 23 March, 2020 passed by Hon'ble the Supreme Court in Suo Motu Petition No.3/ 2020 wherein limitation period of all proceedings, before all judicial/ quasi-judicial was extended until further Orders.
- 3.26 Therefore, MSPGCL submits this Petition.

4. MSEDCL in its reply dated 26 November, 2021 has stated that:

- 4.1 As per the provisions of MERC (Grid Code) Regulations, 2020, MSPGCL was supposed to file its Petition before the Commission with its claim for "Change in Law" within a period of one month from the date of first occurrence of such event. However, MSPGCL did not approach the Commission within the time as specified in the Grid Code Regulations. It was also necessary for the purpose of revision in price for incorporation in the merit order stack of the generation.
- 4.2 The intention of coal tolling arrangement under Case IV bidding is to optimize utilisation of coal. Hence, it is necessary for MSPGCL to substantiate the operational efficiency of the Power Station selected under Case IV bidding as compared to its existing Power Stations which were replaced and to demonstrate the savings in cost of generation.

Merely showing the savings in per unit cost of generation does not showcase the correct benefit derived from the coal tolling arrangement. Therefore, separate assessment may be done for the benefit derived due to operational efficiency / parameters of DIL as compared to Nashik TPS excluding the cost of fuel which is a pass through in any case.

- 4.3 MSPGCL has claimed an additional impact of Rs. 72 Lakhs with respect to Debit / Credit Notes. However, MSPGCL has not provided any details with respect to the said additional claim made on account of Debit / Credit Notes.
- 4.4 MSPGCL shall provide necessary reconciliation of grade slippage on account of coal received during the contract period at power stations of DIL and IEPL under Case IV arrangement. MSPGCL shall also clarify as to whether the reconciliation is finalised or not. MSPGCL shall also consider the amendment dated 25 October, 2018 and revise its computation of GCV from equilibrated basis to ARB basis post moisture correction and accordingly compute the surplus coal quantity available with DIL.
- 4.5 MSPGCL had communicated the final reconciliation to DIL vide its letter dated 30 April, 2020. Hence, for the period of supply of power under Case IV arrangement i.e., from April 2018 to January 2019, Petitioner was able to provide for final reconciliation only after the completion of one year and three months from the last date of the contract period and accordingly DIL had supplied additional 57.04 MU to MSEDCL in subsequent period.
- 4.6 MSPGCL has conducted the final reconciliation of coal quality and quantity after significant delay and has not strictly followed the Guidelines specified by the MoP for coal tolling arrangement. Therefore, present Petition may not be allowed.

5. During the first hearing held on 30 November, 2021

- 5.1 The Commission heard the Case No. 127 of 2021 (Phase-I) and Case No. 128 of 2021(Phase-II) together as the issue was similar and identical in nature. Advocate Ms. Deepa Chawan appeared on behalf of DIL and sought to intervene in the matter. The Representative of MSPGCL and MSEDCL stated that they had no objection for the intervention.
- 5.2 Considering that it was a tripartite agreement between parties of these Cases and the intervenor applicant and therefore was a necessary party, the Commission allowed the Intervention Application in these matters.
- 5.3 Advocate of the DIL sought two weeks' time for filing reply to the Petition. Advocate of the MSEDCL requested two weeks' time after DIL's submission for replying to the submission of DIL. MSPGCL requested one week time thereafter for filing its submission. Considering request made by parties, the Commission allowed the time sought by the parties.

6. MSPGCL's Rejoinder submission dated 22 December, 2021 has stated as under:

- 6.1 The (State Grid Code) Regulations, 2020 as referred by MSEDCL in its submission are in force from September, 2020. However, the claim of MSPGCL for Case-IV (Phase-I) is pertaining to period from April, 2018 to January, 2019.
- 6.2 The impact of Change in Law which was computed as Rs.0.06 / kWh, has already been added to the MoD rate. Thus, scheduling of the DIL's Unit during the Contract period was done considering the possible impact of such increase in variable charge. Hence, there is no default on MSPGCL's part in revising MoD rate as per Case- IV Guidelines on account of occurrence of Change in Law event.
- 6.3 The submission of MSEDCL that merely showing the savings in per unit cost of generation does not showcase the correct benefit is completely incorrect.
- 6.4 The details of additional impact of Rs. 72 Lakhs on account of debit/credit Notes are now provided.
- 6.5 The reconciliation of coal supplied to DIL has been carried out on quarterly basis considering the provisional inputs. However, in Case-IV Guidelines dated 20 February, 2017, there was no clarity on the reconciliation of coal. Therefore, there was difference of opinion between MSPGCL and DIL with regards to coal GCV to be considered on ARB basis or equilibrated basis. As a result, there was delay in arriving consensus on the said matter. In view of this, final reconciliation has taken considerable time to get finalized and duly signed by the both the parties.
- 6.6 Finally, abovesaid reconciliation has been undertaken based on equilibrated GCV, which is beneficial for MSPGCL and MSEDCL, as due to consideration of equilibrated GCV for reconciliation, results into more energy to be supplied by IPP to MSEDCL in lieu of transfer of coal as compared to energy considering GCV at ARB basis.
- 6.7 The impact of Rs. 0.06/kWh based on the month wise actual data was added to the MoD whereas, in totality impact of change in law for total Phase-I period is worked out to Rs. 0.12/kWh considering all the impact of debit/credit notes issued by WCL on account of grade variation. This is only 4.3% of the quoted Tariff of Rs.2.76/kWh and the same is within normal range of variation in variable charge.
- 6.8 MSPGCL has only claimed impact of change in law of DIL. In view of final reconciliation of coal related to IEPL is still pending, the claim of change in law related to IEPL is not claimed in the present Petition.
- 6.9 The MoP notified The Electricity (Timely Recovery of Costs due to Change in Law) Rules on 22 October, 2021. It is evident that MoP has directed for automatic pass through of cost of change in law immediately on occurrence of the event and relevant papers/calculation may be submitted to the Commission for post factor approval.

- 7. At the second hearing held on 19 April, 2022 the Commission heard the parties and enquired with MSPGCL about the following:
 - 7.1 To provide the details of the operational norms considered for IPP for reconciliation of such Station heat Rate as the basic objective of Case IV bidding is reduction in cost of power generation to be achieved on account of reduction in transportation cost and operation efficiency of IPP.
 - 7.2 To provide the approach adopted by MSPGCL with respect to Coal quantity and Heat rate Reconciliation provided to IPP under Case IV.
 - 7.3 To reconcile and submit the quantity of coal dispatched to IPP against which the change in law claim has been submitted.
 - 7.4 To provide the rationale of the debit note / credit note adjustment from Coal India Limited in the receipt of the coal as against the assured coal quality as adjusted in the total claim.
- 8. MSPGCL in its submission dated 29 April, 2022 has submitted as under:

8.1 Details of the operational norms consider for IPP for reconciliation of heat.

- a) As per the Case IV guidelines, for floating a tender, ceiling Tariff is set as lowest of the variable cost of the generating stations whose power is to be replaced by generation from IPP. Hence the benefit envisaged is on account of reduction in transportation cost and operational efficiency of the generating station of IPP. This implies that the operational efficiency of the IPP needs to be better than the MSPGCL's generation station whose power is required to be replaced so as to result in reduction in cost.
- b) As submitted in the Petition, the agreement signed with DIL was for 185 MW of power against one unit of 210 MW at Nashik TPS.
- c) As per Clause 1.2.5 of RfP, Bidder has to quote SHR and auxiliary consumption which needs to be less than or equal to presently applicable norms for equivalent Power Station Capacity.

Auxiliary Consumption quoted by Bidder has to be less than or equal to presently applicable MERC norm for equivalent Power Station Capacity."

d) The comparative statement of SHR and auxiliary consumption as provided by IPP, as per the norms under the MYT Regulations 2015 (applicable at the time of bid) and of the generating station of MSPGCL is outlined in the following table:

Table: Comparative Table of Operational Norms of generating plant

| Norms | Capacity of the Unit | Unit | MYT Regulations, 2015 | Quoted by IPP | Generating Station of MSPGCL* | | | |
|---------------------------------|----------------------------|----------|-----------------------------|------------------|-------------------------------------|--|--|--|
| As per DIL – against Nashik TPS | | | | | | | | |
| Station Heat Rate | 300 MW | KCal/kWh | 2400 | 2400 | 2783 | | | |
| Auxiliary Consumption | | % | 8.5% +0.5% | 9% | 11% | | | |

- e) As can be seen from the above table, the SHR and aux consumption proposed by the IPPs are more efficient than the generating station of MSPGCL, resulting in the benefit to end consumers.
- f) Vide letter dated 6 March, 2019, DIL has given a self-certification that the actual Gross heat rate measured for its Unit 1 during the period April-2018 to January-2019 was 2455 kcal/kWh, which was significantly lower than SHR for corresponding generating station of MSPGCL i.e., Nashik TPS.

8.2 Approach for reconciliation of Coal and Heat Reconciliation provided to IPP:

- a) As per Article 8 of DPA signed between MSPGCL and IPP, the coal reconciliation was required to be undertaken every quarter with respect to coal consumed and supply of electricity to MSEDCL. The same was with respect to quality and quantity of coal at loading end considering the efficient operational parameter. Any excess/shortfall quantity of coal transferred to the Seller shall be adjusted in the next quarter and was required to be adjusted accordingly.
- b) Accordingly, based on the coal quantum delivered to IPP at loading end, electricity generation during the said period and shortfall / surplus of heat rate after considering the operational parameter and actual GCV (on Equilibrated basis) of coal at loading end, is calculated.
- c) Based on the heat energy so calculated, the excess / shortfall of coal is calculated based on the GCV_{EOB} and in case of excess coal, equivalent energy has to be

- supplied by IPP and in case of shortfall of coal, the same to be settled through lower energy generation.
- d) Therefore, the reconciliation of the coal quantity takes into consideration, the quantum of coal, efficient operational norm (SHR and auxiliary consumption as per Bid) and GCV_{EQB}. As outlined in the following table, the actual reconciliation is of heat energy, on the basis of which the coal quantum is determined.

Table: Quarterly Heat Reconciliation Statement against coal despatch to DIL

| Particulars | Units | DIL Apr- Jun | DIL Jul-Sep | DIL Oct- Jan | Total | Remarks |
|---|----------|-----------------|---------------|-----------------|---------------|---|
| No. of days | | 76 | 92 | 105 | 273 | |
| No. of hours in a day | | 24 | 24 | 24 | 24 | |
| Actual Generation as per bill | MUs | 326.02 | 134.40 | 316.65 | 777.06 | Actual energy accounted at Delivery point |
| Auxiliary Consumption | | 9.00% | 9.00% | 9.00% | 9.00% | As per bid |
| Gross Generation | MUs | 358.26 | 147.69 | 347.96 | 853.91 | |
| Station Heat Rate | kcal/kWh | 2,400 | 2,400 | 2,400 | 2,400 | As per bid |
| Overall Heat Generation | G Cal | 8,59,826.70 | 3,54,448.35 | 8,35,114.62 | 20,49,389.67 | Heat required for electricity generation |
| Specific Oil Consumption | ml/kWh | 0.5 | 0.5 | 0.5 | 0.5 | As per MYT Regulations, 2015 |
| Calorific Value of Oil | kcal/l | 10,000 | 10,000 | 10,000 | 10,000 | |
| Heat from Oil | Gcal | 1,791.31 | 738.43 | 1,739.82 | 4,269.56 | Heat offset by Oil |
| GCV of Coal | kCal/kg | 4026.20 | 3972.11 | 3748.96 | 3901.66 | GCV _{EQB} at loading point |
| Supplied quantity of Coal before transit Loss | МТ | 2,17,850.41 | 1,17,305.98 | 2,31,795.59 | 5,66,951.98 | Coal supplied at loading end |
| Transit loss | % | 0.80% | 0.80% | 0.80% | 0.80% | As per MYT Regulations, 2015 |
| Supplied quantity of Coal | MT | 2,16,107.61 | 1,16,367.53 | 2,29,941.23 | 5,62,416.37 | Coal adjusted with transit loss |
| Heat from Coal | GCal | 8,70,091.40 | 4,62,225.01 | 8,62,039.75 | 21,94,356.15 | Heat Expected from Supplied coal at specified GCV |
| Extra Heat - deficit/(surplus) | Gcal | (12,056.00) | (1,08,515.09) | (28,664.95) | (1,49,236.04) | |
| Coal quantity to be adjusted @ given GCV | МТ | -2,994.39 | -27,319.23 | -7,646.11 | -38,249.39 | |
| Coal quantity to be adjusted (Grossed up) | MT | -3,018.54 | -27,539.55 | -7,707.78 | -38,557.86 | |
| Units to be adjusted | MUs | -4.61 | -41.48 | -10.96 | -57.04 | |

e) It can be observed from the above table, based on the coal quantum issued to DIL and related GCV_{EQB}, a reconciliation was carried out resulting in a surplus coal quantity available equivalent to 57.04 MUs. Against this surplus quantity, DIL has initiated supply of additional surplus energy from 12 May, 2020.