

Miscellaneous Application 53 of 2020
in
Case No 189 of 2013 and Case No 140 of 2014

Miscellaneous Application 53 of 2020 filed by Adani Power Maharashtra Limited for issuing consequential Orders as per APTEL Judgment dated 14 September, 2020 in Appeal No 182 of 2019

Coram
I.M. Bohari, Member
Mukesh Khullar, Member

| | |
|-----------------------------------------------------------|-----------------------|
| Adani Power Maharashtra Limited | Petitioner |
| Vs | |
| 1) Maharashtra State Electricity Distribution Company Ltd |Respondent No1 |
| 2) Prayas (Energy Group) | Respondent No 2 |
| 3) Thane Belapur Industries Association |Respondent No 3 |

Appearance

| | |
|---------------------|-----------------------------|
| For Petitioner | :Shri. Ramanuj Kumar (Adv.) |
| For Respondent No1 | :Shri. Ashish Singh (Adv.) |
| For Respondent No 2 | : None |
| For Respondent No 3 | : None |

ORDER

Date: 10 December, 2020

1. This is consequential proceedings on account of Judgement of Hon'ble Appellate Tribunal for Electricity (**APTEL**) dated 14 September, 2020 in Appeal No. 182 of 2019. Background to this APTEL judgment is summarized below:

1.1 Adani Power Maharashtra Ltd. (**APML**) has entered into four long-term Power Purchase Agreements (**PPAs**) dated 8 September, 2008, 31 March, 2010, 9 August, 2010, and 16 February, 2013 for supply of 1320 MW, 1200 MW, 125 MW and 440 MW, respectively, with Maharashtra State Electricity Distribution Co. Ltd. (**MSEDCL**) pursuant to competitive bidding processes conducted by MSEDCL under Section 63 of the Electricity Act, 2003.

- 1.2 The Commission vide its Order dated 7 March, 2018 in Case No. 189 of 2013 & Case No. 140 of 2014 approved shortfall in coal supply due to amendment to NCDP 2007 as Change in Law events under the PPAs and prescribed the parameters and methodologies for computing compensation towards such Change in Law event.
- 1.3 Aggrieved by some of the parameters [Station Heat Rate (**SHR**), Gross Calorific Value (**GCV**) of coal and restricting coal shortfall to the level assured under amendment to NCDP 2007] stipulated in the Commission's Order dated 7 March, 2018 for computation of Change in Law compensation, APML preferred an appeal in APTEL vide Appeal No 182 of 2019.
- 1.4 The APTEL vide its Judgment dated 14 September, 2020 in Appeal No. 182 of 2019 has set aside the Impugned Order to the extent challenged in Appeal and remanded the matter to the Commission for passing consequential Order within 3 months. Relevant extract of the Judgment is as follows:

“The impugned order dated 07.03.2018 passed by Maharashtra Electricity Regulatory Commission in Case Nos. 189 of 2013 and 140 of 2014 are hereby set aside to the extent challenged in the Appeal and our findings, stated supra.

The State Commission is directed to issue the consequential orders as expeditiously as possible within a period of three months from the pronouncement of this judgment / order.”

2. Post issuance of above APTEL Judgment dated 14 September, 2020, APML vide its application dated 9 October, 2020 has requested the Commission to issue consequential Orders. Said application has been registered as a case bearing no. MA No. 53 of 2020.
- 3. Further, APML has made following submission on dated 07 November 2020:**

3.1 APTEL vide its Judgment dated 14 September, 2020 has decided as follows:

a. SHR for Change in Law compensation

“7.14 From the aforesaid discussion, it emerges that this Tribunal has already held that the SHR submitted in the bid (when it is not a bid parameter as per the bidding guidelines) by a generating company is not to be used as the basis for computing the coal shortfall requirement and thereby for computation of change in law compensation to be awarded to the generating company. Such linking of change in law compensation to the SHR mentioned in the bid documents would not reconstitute the affected party to the same economic position as if the approved change in law event had not occurred. This issue is therefore decided in favour of the Appellant and the Respondent No. 2 is directed to allow change in law compensation on the basis of the SHR specified in the MERC MYT Regulations, 2011 or the actual SHR achieved by the Appellant, whichever

is lower. This would sufficiently protect the interests of the consumers against any plant inefficiency being passed on to the Discoms or the consumers.”

b. GCV for Change in Law compensation

“8.9 For the aforesaid reasons, this issue is decided in favour of the Appellant and it is directed that the compensation for the Change in Law approved by the MERC shall be computed on the basis of actual GCV of coal received.”

c. Restriction of shortfall compensation up to the percentages specified in NCDP 2013

“9.12 From the above decision, it is clear that the methodology for compensation in case of shortfall in domestic coal under the NCDP regime cannot be different from the methodology for compensation in case of shortfall under the SHAKTI Policy. This Tribunal has already held that the shortfall in domestic coal supply needs to be measured against 100% supply assurance contained under the NCDP 2007 and when measured against this assurance, restricting Change in law relief to the maximum of 35% to 25% for the respective four years of the 12th plan is not justified. This issue is, therefore, decided in favour of the Appellant and the Impugned Order is set aside to the extent it limits the Change in Law relief to the Appellant with reference to the maximum of (1) actual quantum of coal offered for offtake by CIL, and (2) the minimum assured quantum as per the NCDP 2013 for the respective year. We direct that the Respondent MSEDCL shall compute Change in Law compensation on the basis of actual shortfall in supply of domestic coal suffered by the Appellant from the start date approved by the MERC.

3.2 Methodology for computation of domestic coal shortfall provided by the Commission in the order dated 7 March, 2018 requires to be modified in the light of the above APTEL’s Judgment as follows:

- a. Following is the revised table for computing the impact of Change in Law allowed vide order dated 7 March, 2018:

(a) For Capacity tied up under PPAs from 1180 MW capacity having LOA/FSA

| Particulars | Legend | Units | Value |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|-------|
| Scheduled Generation at interconnection point | A | kWh | |
| Net SHR as submitted in the Bid or SHR per norms specified for new thermal Generating Stations in MYT Regulations, 2011 or Actual, whichever is superior | B | kcal/kWh | |
| Total Heat Content required | C= A x B | kcal | |
| Reference Actual GCV of the coal received at Plant under LoA/FSA (as received) grade assured in the applicable LoA/FSA (In case range is specified, middle value of the GCV range of the assured coal grade) | D | kcal/kg | |

| Particulars | Legend | Units | Value |
|---------------------------------------------------------------------------------|-------------------------------------------|---------|-------|
| Total coal required at the reference actual GCV | $E = C/D$ | Kg | |
| Minimum assured CIL coal supply under LoA/FSA as per NCDP 2013 | F | % | |
| | $G = E \times F$ | Kg | |
| Actual Coal received from offered by CIL under the LoA/FSA | HF | %Kg | |
| Coal available under LoA/FSA | $J = \text{Maximum of G and I}$ | Kg | |
| Shortfall in CIL coal supply under LoA/FSA | $G = E - F$ $K = E - J$ | kg | |
| Heat Value of shortfall in coal supply under LoA/FSA | $H = G \times D$ $L = K \times D$ | Kcal | |
| GCV of alternative coal (as received) | $I M$ | kcal/kg | |
| Alternative coal quantum required to meet the shortfall | $J = H / I$ $N = L/M$ | Kg | |
| Landed price of LoA/FSA coal | $K \Theta$ | Rs./kg | |
| Landed price of Alternate Coal as per indices/benchmarks (Given in table below) | $L P$ | Rs./kg | |
| Cost of shortfall in FSA quantity at Base Price. | $M = K \times G$ $Q = K \times \Theta$ | Rs. | |
| Cost of alternative coal allowable towards shortfall | $N = L \times J$ $R = N \times P$ | Rs. | |
| Total Impact of Change in Law | $O = N - M$ $S = R - Q$ | Rs. | |
| Impact of Change in Law per Unit | $P = O / A$ $T = S/A$ | Rs./kWh | |

- b. The above table after incorporating the changes in terms of the APTEL judgment is reproduced below:

(a) For Capacity tied up under PPAs from 1180 MW capacity having LOA/FSA

| Particulars | Legend | Units | Value |
|------------------------------------------------------------------------------------------------------------------------------|------------------|----------|-------|
| Scheduled Generation at interconnection point | A | kWh | |
| Net SHR as per norms specified for new thermal Generating Stations in MYT Regulations, 2011 or Actual, whichever is superior | B | kcal/kWh | |
| Total Heat Content required | $C = A \times B$ | kcal | |
| Actual GCV of the coal received at Plant under LoA/FSA (as received) | D | kcal/kg | |
| Total coal required at actual GCV | $E = C/D$ | Kg | |
| Actual Coal received from CIL under the LoA/FSA | F | Kg | |
| Shortfall in CIL coal supply under LoA/FSA | $G = E - F$ | kg | |
| Heat Value of shortfall in coal supply under LoA/FSA | $H = G \times D$ | Kcal | |
| GCV of alternative coal (as received) | I | kcal/kg | |
| Alternative coal quantum required to meet the shortfall | $J = H / I$ | Kg | |
| Landed price of LoA/FSA coal | K | Rs./kg | |
| Landed price of Alternate Coal as per indices/benchmarks (Given in table below) | L | Rs./kg | |

| Particulars | Legend | Units | Value |
|------------------------------------------------------|------------------|---------|-------|
| Cost of shortfall in FSA quantity at Base Price. | $M = K \times G$ | Rs. | |
| Cost of alternative coal allowable towards shortfall | $N = L \times J$ | Rs. | |
| Total Impact of Change in Law | $O = N - M$ | Rs. | |
| Impact of Change in Law per Unit | $P = O / A$ | Rs./kWh | |

(b) For Capacity tied up under PPAs from 1320 MW capacity having MoU

| Particulars | Legend | Units | Value |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------|-------|
| Scheduled Generation at interconnection point | A | kWh | |
| Net SHR as submitted in the Bid or SHR and Auxiliary Consumption per norms specified for new thermal Generating Stations in MYT Regulations, 2011 or Actual, whichever is superior | B | kcal/kWh | |
| Total Heat Content required from coal | $C = A \times B$ | kcal | |
| Actual Reference GCV of coal received at Plant under MoU (as received) grade as per MoU (In case range is specified, middle value of the GCV range of the assured coal grade) | D | kcal/kg | |
| Total coal required as per actual at reference GCV | $E = C/D$ | kg | |
| Maximum assured quantum of coal in MoU | F | % | |
| | $G = E \times F$ | kg | |
| Actual coal received from offered by CIL under the MoU | $F \times H$ | % | |
| | $G \times I$ | Kg | |
| Actual coal offered under MoU | $J = I$ | kg | |
| Shortfall in CIL coal supply under MoU | $H = E - G$ $K = E - J$ | kg | |
| Heat Value of shortfall in CIL coal supply under MoU | $I = H \times D$ $L = K \times D$ | kcal | |
| GCV of alternative coal (as received) | $J \times M$ | kcal/kg | |
| Alternative coal quantum to meet shortfall | $K = I \div J$ $N = L \div M$ | kg | |
| Landed price of coal under MoU | $L \times O$ | Rs./kg | |
| Landed price of linkage coal for the same Grade of coal as offered in MoU | $M \times P$ | Rs./kg | |
| Landed price of alternative coal as per indices/benchmarks (given in Table below) | $N \times Q$ | Rs./kg | |
| Cost of shortfall in MoU quantity at Base Price (linkage coal price) | $O = H \times M \times R$ $= K \times P$ | Rs | |
| Cost of alternative coal allowable towards shortfall | $P = K \times N \times S$ $= N \times Q$ | Rs. | |
| Impact of Change in Law for shortfall in quantity | $Q = P - O$ $T = S - R$ | Rs. | |
| Impact of Change in Law for quantity supplied under MoU with respect to linkage coal price | $R = G \times (L - M)$ $U = J \times (O - P)$ | Rs. | |
| Total Impact of Change in Law | $S = Q + R$ $V = T + U$ | Rs. | |

| Particulars | Legend | Units | Value |
|----------------------------------|----------------------------|---------|-------|
| Impact of Change in Law per Unit | $T = S / A$ $W = V / A$ | Rs./kWh | |

- c. The above table after incorporating the aforementioned changes in terms of the APTEL judgment is reproduced below:

(b) For Capacity tied up under PPAs from 1320 MW capacity having MoU

| Particulars | Legend | Units | Value |
|------------------------------------------------------------------------------------------------------------------------------|------------------------|----------|-------|
| Scheduled Generation at interconnection point | A | kWh | |
| Net SHR as per norms specified for new thermal Generating Stations in MYT Regulations, 2011 or Actual, whichever is superior | B | kcal/kWh | |
| Total Heat Content required from coal | $C = A \times B$ | kcal | |
| Actual GCV of coal received at Plant under MoU (as received) | D | kcal/kg | |
| Total coal required as per actual GCV | $E = C / D$ | kg | |
| Actual coal received from CIL under the MoU | F | % | |
| | G | Kg | |
| Shortfall in CIL coal supply under MoU | $H = E - G$ | kg | |
| Heat Value of shortfall in CIL coal supply under MoU | $I = H \times D$ | kcal | |
| GCV of alternative coal (as received) | J | kcal/kg | |
| Alternative coal quantum to meet shortfall | $K = I \div J$ | kg | |
| Landed price of coal under MoU | L | Rs./kg | |
| Landed price of linkage coal for the same Grade of coal as offered in MoU | M | Rs./kg | |
| Landed price of alternative coal as per indices/benchmarks (given in Table below) | N | Rs./kg | |
| Cost of shortfall in MoU quantity at Base Price (linkage coal price) | $O = H \times M$ | Rs. | |
| Cost of alternative coal allowable towards shortfall | $P = K \times N$ | Rs. | |
| Impact of Change in Law for shortfall in quantity | $Q = P - O$ | Rs. | |
| Impact of Change in Law for quantity supplied under MoU with respect to linkage coal price | $R = G \times (L - M)$ | Rs. | |
| Total Impact of Change in Law | $S = Q + R$ | Rs. | |
| Impact of Change in Law per Unit | $T = S / A$ | Rs./kWh | |

3.3 APML has requested the Commission to pass consequential order approving the above-mentioned revised methodology for computation of Change in Law relief for domestic coal shortfall, in compliance with the APTEL's Judgement dated 14 September, 2020.

4. MSEDCL in its reply dated 9 November, 2020 has stated that it has statutory right to challenge the legality and validity of the APTEL's Judgment dated 14 September, 2020

before the Hon'ble Supreme Court and its participation in the present proceeding is without prejudice to such rights.

5. At the time of E-hearing dated 10 November, 2020, MSEDCL has requested adjournment on the ground that APML's submission proposing changes in methodology for computing Change in Law compensation was not received by it in advance and it would require additional time for filing reply. The Commission accepted this request and adjourned the matter to next date.
6. **MSEDCL in its additional submission dated 21 November, 2020 has stated as follows:**
 - 6.1 APTEL vide judgment dated 14 September, 2020 has allowed Change in Law compensation on the basis that the SHR specified in the MERC MYT Regulations, 2011 or the actual SHR achieved by the APML, whichever is lower. The Commission from time to time has specified SHR for different plant capacities through MYT regulations and there have been improvements in the specified SHR in the MYT Regulations over a period. Therefore, SHR specified by MERC MYT Regulations from time to time needs to be considered for arriving at Change in Law compensation to avoid passing of any inefficiency to the consumers.
 - 6.2 A specific period of generation is to be governed by the applicable MYT Regulations for that specific period. Hence, any period post 2015 and thereafter has necessarily to be governed by subsequent amended MYT Regulations. It is a settled principle of law that a judgment passed by a Court of law cannot make a substantive Act, Rules or by Law redundant.
 - 6.3 Central Electricity Regulatory Commission (**CERC**) also in its order dated 15 November, 2018 in Petition No.88/MP/2018 in the matter of GMR Vs MSEDCL has considered different SHRs for different MYT periods even if the plant is commissioned in the year 2014. Therefore, it is requested to consider SHR as per the prevailing MYT Regulations specified by the Commission from time to time instead of MYT Regulations 2011.
 - 6.4 Further, APTEL has directed to consider GCV on as received basis for computation of Change in Law impact. As per the data received from APML, it is observed that in few cases, degradation in GCV of coal received is excessively high i.e. in the range of 1000-1100 kcal/kg. Such loss of GCV for other generators which are not far away from APML plant is in the range 325-350 kcal/kg only.
 - 6.5 The Commission from time to time has provided the ceiling in the degradation of coal on As Received Basis (**ARB**) for generators under Section 62. Allowing higher degradation in GCV will unduly pass the inefficiency of the generator during handling and transportation of coal, which will cause additional financial burden on the consumers.

6.6 It is noticed from the year wise data of ARB of coal received from APMIL that the degradation in weighted average GCV of coal as per the data submitted for the years FY 2013-14 to 2019-20 ranges between 292 kcal/kg to 614 kcal/kg and such drastic variation is observed in the GCV degradation of coal due to some inefficiency. It is observed from the data that the degradation of 275 kcal/kg may be reasonable as ceiling. Therefore, it is requested to the Commission to allow ceiling for loss of GCV for protecting the interest of consumers.

6.7 Therefore, MSEDCL proposes that, subject to ceiling in degradation of GCV, the ARB GCV may be considered as per following formula in case of base (FSA) coal:

$$\frac{\{(Quantity\ of\ Coal\ Actually\ received\ \times\ ARB\ of\ such\ received\ coal^*)\ +\ (Balance\ Contracted\ quantity\ of\ coal\ \times\ (ADB\ of\ coal\ (Mid\ value\ of\ assured\ grade)\ -\ degradation\ in\ kcal\ to\ arrive\ at\ ARB^{**})\}}}{Total\ Quantity}$$

6.8 APMIL post the issuance of the Commission's Order in Case No. 189 of 2013 and 140 of 2014 on 7 March, 2018 has submitted coal data along with the claims. Upon scrutiny of the data MSEDCL has observed that quantum of coal offered by CIL and quantum of coal received by APMIL has major difference. On perusal of Fuel Supply Agreement (FSA) it is noticed that there is provision of deemed delivery of coal if the coal offered is not totally lifted by the generator due to default of generators on account of payment, railway bookings etc.

6.9 South Eastern Coal Limited (SECL) considers the offered coal to be deemed delivered in case of the default of Generators. Hence, while compensating the Change in Law, the coal offered needs to be considered instead of coal received as the shortfall in coal offered and coal received is on account of noncompliance by the generator. Non consideration of the coal offered may unduly burden common consumers as it will provide the compensation for the default of the generator.

6.10 CIL passes credit due to degradation of the coal, to the generators commensurate to the grade of the coal received on the basis of ARB test report. This credit also needs to be considered and passed to the MSEDCL.

6.11 MSEDCL has requested the Commission to clarify and hold that scheduled generation shall be restricted to normative generation only. It requested the following changes in the methodology approved by the Commission in Case No 189 of 2013 and Case No 140 of 2014

- a. Scheduled Generation < Normative Generation: The maximum of actual coal receipt & offered quantum (i.e. quantum offered by CIL) shall be considered as available coal even if Scheduled generation is less than normative.

- b. Scheduled Generation > Normative Generation: The maximum of actual coal receipt & offered quantum (i.e. quantum offered by CIL) shall be considered as available coal.
- c. However, if generator generates more than the normative i.e. 85%, no compensation shall be given (As coal tie-up is for 85% Generation. i.e. CIL is having commitment for 85% of normative generation) as the generation over and above normative generation is the strategic or commercial decision of APML.

6.12 APML had a tie up through MoU to meet the coal requirement for its unit 4 & 5 at Tiroda TPS. From the details submitted by APML, it is observed that, APML has not received coal under MoU for FY 2013-14 & 2016-17. Further the quantum received during FY 2014-15 & 2015-16 is very less.

6.13 However as per the APTEL Judgment GCV is to be considered on ARB basis. Under these circumstances when no actual coal has been received, the verification of GCV on ARB basis creates certain concerns. Hence MSEDCL submits that:

- a. Working of GCV based on contracted quantum and its relevant GCV shall be done as MoU coal is of different grades.
- b. As the coal under MoU is not at all received/ Less received in some years, ARB GCV of such coal need to be calculated as below:

Weighted average GCV of all contracted mines:

$$\{(\text{Quantity of Coal Actually received} * \text{ARB of such received coal}) + (\text{Balance Contracted quantity of coal} * (\text{ADB of coal} - 275 \text{ kcal to arrive at ARB}))\} / \text{Total Quantity.}$$

6.14 The Commission has given the methodology in the order dated 7 March, 2018 in tabular form for capacity tied up under PPAs from 1180 MW having LOA/FSA and the capacity of 1320 MW having MoU. The necessary changes need to be incorporated regarding the SHR, GCV and coal quantum parameters as directed by APTEL. As per MSEDCL, Tables in Order dated 7 March, 2018 need to be modified as follows:

A) For Capacity tied up under PPAs from 1180 MW capacity having LOA/FSA

| Particulars | Legend | Units | Remark |
|-------------------------------------------------------------------------------------------------------------------------------------|--------|----------|------------------------------------------------------------------------------------------------|
| Scheduled Generation at interconnection point Actual Injection commensurate with Normative Generation | A | kWh | Actual Injection commensurate with 80% / 85% Normative Generation |
| Net SHR as submitted in the bid or SHR and Auxiliary consumption per norms specified for new thermal Generating Stations | B | kcal/kWh | As the intent of Hon. APTEL's judgment is to protect the consumer's interest, SHR as per norms |

| Particulars | Legend | Units | Remark |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| in recent MYT Regulations, 2011 or actual, whichever is superior | | | specified in recent MYT regulations from time to time |
| Total Heat Content required | $C = A \times B$ | kcal | |
| Reference GCV of the coal grade assured in the applicable LoA/FSA (In case range is specified, middle value of the GCV range of the assured coal grade) Actual GCV of coal received (As received) | D | kcal/kg | The degradation in GCV to arrive at ARB GCV may be restricted up to certain ceiling, as there is high degradation observed in the GCV as per data submitted by APML. |
| Total coal required at the reference GCV | $E = C/D$ | kg | |
| Minimum assured CIL coal supply under LoA/FSA as per NCDP 2013 | F | | |
| | $G = E \times F$ | | |
| Actual coal offered / received by/from CIL under the LoA/FSA whichever is higher | F | % | As per the provisions of FSA, the coal offered is considered as deemed delivered, hence, such offered quantum or actual coal received whichever is higher need to be considered |
| | G | kg | |
| Coal available under LoA/FSA | J = Maximum of G and I H = Maximum of Coal received or offered | kg | |
| Shortfall in CIL coal supply under LoA/FSA | $K = E - J$ $I = E - H$ | kg | |
| Heat Value of shortfall in CIL coal supply under LoA/FSA | $L = K \times D$ $J = I \times D$ | kcal | |
| GCV of alternative coal (as received) | M K | kcal/kg | |
| Alternative coal quantum required to meet the shortfall | $N = L \div M$ $L = J \div K$ | kg | |
| Landed price of LoA/FSA coal | Ø M | Rs./kg | |
| Landed price of alternative coal as per indices/benchmarks (given in Table below) | P N | Rs./kg | |
| Cost of shortfall in FSA quantity at Base Price | $Q = K \times Ø$ $O = I \times M$ | Rs | |

| Particulars | Legend | Units | Remark |
|------------------------------------------------------|--------------------------------------|---------|--------|
| Cost of alternative coal allowable towards shortfall | $R = N \times P$ $P = L \times N$ | Rs. | |
| Impact of Change in Law | $S = R - Q$ $Q = P - O$ | Rs. | |
| Impact of Change in Law per Unit | $T = S / A$ $R = Q / A$ | Rs./kWh | |

The above table after incorporating the changes in terms of the APTEL Judgment is reproduced as below:

A) For Capacity tied up under PPAs from 1180 MW capacity having LOA/FSA

| Particulars | Legend | Units | Value |
|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------|-------|
| Actual Injection commensurate with Normative Generation | A | kWh | |
| Net SHR as per norms specified for thermal Generating Stations in recent MYT Regulations, or actual, whichever is superior | B | kcal/kWh | |
| Total Heat Content required | $C = A \times B$ | kcal | |
| Actual GCV of coal received (As received) | D | kcal/kg | |
| Total coal required at the reference GCV | $E = C / D$ | kg | |
| Actual coal offered / received by/from CIL under the LoA/FSA whichever is higher | F | % | |
| | G | kg | |
| Coal available under LoA/FSA | H = Maximum of Coal received or offered | kg | |
| Shortfall in CIL coal supply under LoA/FSA | $I = E - H$ | kg | |
| Heat Value of shortfall in CIL coal supply under LoA/FSA | $J = I \times D$ | kcal | |
| GCV of alternative coal (as received) | K | kcal/kg | |
| Alternative coal quantum required to meet the shortfall | $L = J \div K$ | kg | |
| Landed price of LoA/FSA coal | M | Rs./kg | |
| Landed price of alternative coal as per indices/benchmarks (given in Table below) | N | Rs./kg | |
| Cost of shortfall in FSA quantity at Base Price | $O = I \times M$ | Rs | |
| Cost of alternative coal allowable towards shortfall | $P = L \times N$ | Rs. | |
| Impact of Change in Law | $Q = P - O$ | Rs. | |
| Impact of Change in Law per Unit | $R = Q / A$ | Rs./kWh | |

B) For Capacity tied up under PPAs from 1320 MW capacity having MoU

| Particulars | Legend | Units | Remarks |
|------------------------------------------------------------------------------------------------------------------|--------|-------|-------------------------------------------------------------|
| Scheduled Generation at interconnection point Actual Injection commensurate with Normative Generation | A | kWh | Actual Injection commensurate with 85% Normative Generation |

| Particulars | Legend | Units | Remarks |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Net SHR as submitted in the bid or SHR and Auxiliary consumption per norms specified for new thermal Generating Stations in recent MYT Regulations, 2011 or actual, whichever is superior | B | kcal/kWh | As the intent of Hon. APTEL's judgment is to protect the consumer's interest, SHR as per norms specified in recent MYT regulations from time to time |
| Total Heat Content required from coal | $C = A \times B$ | kcal | |
| Reference GCV of coal grade as per MoU (In case range is specified, middle value of the GCV range of the assured coal grade) Actual GCV of coal received / ADB GCV of contracted quantum under MoU as per formula suggested | D | kcal/kg | The degradation in GCV to arrive at ARB GCV may be restricted up to certain ceiling, as there is high degradation observed in the GCV as per data submitted by APML. As the coal under MoU is not at all received/less received in some years, ARB GCV of such coal need to be calculated as below – Weighted average of all contracted mines - {(Quantity of Coal Actually received * ARB of such received coal) + (Balance Contracted quantity of coal * (ADB of coal -275 kcal to arrive at ARB))} / Total Quantity. |
| Total coal required at reference ARB GCV | $E = C/D$ | kg | |
| Maximum assured quantum of coal in MoU | F | | |
| | G | | |
| Actual coal received or offered by CIL under the MoU whichever is more | H F | % | |
| | I G | Kg | |
| Actual Coal offered by CIL under MoU | J | | |
| Shortfall in CIL coal supply under MoU | $K = E - J$ $H = E - G$ | kg | |
| Heat Value of shortfall in CIL coal supply under MoU | $L = K \times D$ $I = H \times D$ | kcal | |
| GCV of alternative coal (as received) | M J | kcal/kg | |
| Alternative coal quantum to meet shortfall | $N = L \div M$ $K = I \div J$ | kg | |
| Landed price of coal under MoU | Ø L | Rs./kg | |

| Particulars | Legend | Units | Remarks |
|--------------------------------------------------------------------------------------------|--------------------------------------------------|--------|---------|
| Landed price of linkage coal for the same Grade of coal as offered in MoU | P M | Rs./kg | |
| Landed price of alternative coal as per indices/benchmarks (given in Table below) | Q N | Rs./kg | |
| Cost of shortfall in MoU quantity at Base Price (linkage coal price) | $R = K \times P$ $O = H \times M$ | Rs | |
| Cost of alternative coal allowable towards shortfall | $S = N \times Q$ $P = K \times N$ | Rs. | |
| Impact of Change in Law for shortfall in Quantity | $T = S - R$ $Q = P - O$ | Rs. | |
| Impact of Change in Law for quantity supplied under MoU with respect to linkage coal price | $U = J \times (O - P)$ $R = G \times (L - M)$ | Rs. | |
| Total Impact of Change in Law | $V = T + U$ $S = Q + R$ | | |
| Impact of Change in Law per Unit | $W = V / A$ $T = S / A$ | | |

The above table after incorporating the changes in terms of the APTEL Judgment is reproduced below:

B) For Capacity tied up under PPAs from 1320 MW capacity having MOU

| Particulars | Legend | Units | Value |
|---------------------------------------------------------------------------------------------------------------------------|------------------|----------|-------|
| Actual Injection commensurate with Normative Generation | A | kWh | |
| Net SHR as per norms specified for thermal Generating Stations in recent MYT Regulations or actual, whichever is superior | B | kcal/kWh | |
| Total Heat Content required from coal | $C = A \times B$ | kcal | |
| Actual GCV of coal received / contracted quantum under MoU as per formula suggested | D | kcal/kg | |
| Total coal required at ARB GCV | $E = C / D$ | kg | |
| Actual coal received or offered by CIL under the MoU whichever is more | F G | % Kg | |
| Shortfall in CIL coal supply under MoU | $H = E - G$ | kg | |
| Heat Value of shortfall in CIL coal supply under MoU | $I = H \times D$ | kcal | |
| GCV of alternative coal (as received) | J | kcal/kg | |
| Alternative coal quantum to meet shortfall | $K = I \div J$ | kg | |
| Landed price of coal under MoU | L | Rs./kg | |
| Landed price of linkage coal for the same Grade of coal as offered in MoU | M | Rs./kg | |

| Particulars | Legend | Units | Value |
|--------------------------------------------------------------------------------------------|------------------------|--------|-------|
| Landed price of alternative coal as per indices/benchmarks (given in Table below) | N | Rs./kg | |
| Cost of shortfall in MoU quantity at Base Price (linkage coal price) | $O = H \times M$ | Rs | |
| Cost of alternative coal allowable towards shortfall | $P = K \times N$ | Rs. | |
| Impact of Change in Law for shortfall in Quantity | $Q = P - O$ | Rs. | |
| Impact of Change in Law for quantity supplied under MoU with respect to linkage coal price | $R = G \times (L - M)$ | Rs. | |
| Total Impact of Change in Law $V = T + U$ | $S = Q + R$ | Rs. | |
| Impact of Change in Law per Unit | $T = S/A$ | | |

7. At the time of E- hearing held on 13 November, 2020:

7.1 Advocate of APML stated that:

- a. MSEDCL's submission that instead of using fixed SHR as stipulated in MYT Regulations 2011, SHR as specified in MYT Regulations from time to time needs to be used was never contested before the APTEL and therefore need not be considered in consequential proceeding. Also, the Commission in its Order dated 7 March, 2018 specified that MYT Regulations, 2011 are applicable to APML units which is not challenged by MSEDCL and hence the same has now attained finality.
- b. Similarly, contention of MSEDCL to put ceiling limit for degradation of coal was never contested before the APTEL and hence now it cannot be prayed for in present proceedings. But APML is agreeing with the methodology suggested by MSEDCL for arriving at as received GCV of coal for the circumstances when there is no actual coal receipt under MoU.
- c. The contention of MSEDCL with respect to Scheduled Generation Vs Normative generation is not part of APTEL Order and needs to be rejected.
- d. Further, MSEDCL's contention that shortfall in coal needs to be computed with reference to coal offered by Coal companies was also never contested by MSEDCL and hence cannot be considered during this consequential relief proceeding. Further, CERC in subsequent judgment allowed shortfall in coal based on actual receipt of the coal at the plant and not on coal offered by coal companies.

7.2 Advocate of MSEDCL stated that:

- a. The Commission needs to undertake prudence check while approving the Change in Law claims in terms of SHR and GCV. Though these issues were not agitated before APTEL, inefficiencies of the generators shall not be passed on to the consumers.

- b. It has further stated that participation in present proceeding is without prejudice to its statutory rights to appeal against APTEL Order dated 14 September, 2020 before the Hon'ble Supreme Court.

Commission's Analysis and Ruling

8. The Commission notes that APML had earlier approached the Commission in Case No. 189 of 2013 seeking compensation for shortfall in coal supply. After several rounds of litigation, through its Order dated 7 March, 2018 in Case No. 189 of 2013 & 140 of 2014, the Commission finally allowed compensation under the Change in Law provisions of PPAs for shortfall in coal supply due to amendment of NCDP 2007. In the said Order dated 7 March, 2018, the Commission stipulated a methodology for arriving at compensation on account of Coal Shortfall.
9. Methodology in Order dated 7 March, 2018 which has been used as reference for all subsequent Orders, stipulated certain benchmarks for cost parameters as well as performance parameters. APML vide its Appeal No. 182 of 2019 challenged the Commission's decision of use of bid SHR, GCV as middle value of coal grade declared in FSA and restricting coal shortfall to level assured in amendment to NCDP 2007.
10. Hon'ble APTEL vide its Judgment dated 14 September, 2020, allowed APML's appeal and remanded the matter to the Commission with direction to issue consequential Order. Relevant part of APTEL's Judgment has been reproduced at para 3.1 above. The APTEL has set aside commission's ruling in Order dated 7 March, 2018 to the following extent:
 - a. **SHR:** In Order dated 7 March, 2018, it was directed to use SHR submitted in Bid or as specified in MYT Regulation, 2011 whichever is lower. Hon'ble APTEL has ruled that Bid SHR cannot be considered. Instead, actual SHR or as stipulated in MYT Regulations, 2011, whichever is lower shall be used for computing change in law compensation.
 - b. **GCV:** In Order dated 7 March, 2018, it was directed to use midpoint of GCV grade stipulated in FSA/MoU instead of as received GCV. However, Hon'ble APTEL has allowed to use as received GCV.
 - c. **Compensation for actual Coal Shortfall:** In Order dated 7 March, 2018, compensation for actual shortfall was restricted to revised assured quantity as per amendment to NCDP 2007. However, Hon'ble APTEL has allowed compensation for actual shortfall in coal supply without restricting to assurance under amendment to NCDP 2007.
11. Present proceeding being consequential to the APTEL judgment dated 14 September, 2020, in normal circumstances, scope of proceeding needs to be limited to give effect to APTEL judgment. However, during the proceedings in the present matter, MSEDCL has

raised some additional issues relating to computation of compensation. Although, APML has opposed raising of such issues as these were not agitated before the APTEL, it supported MSEDCL's proposal relating to consideration of reference GCV for MoU coal for the situations when there was no actual receipt of coal for the year. This necessitates the Commission to go into clarifications sought by MSEDCL. Also, it is a fact that compensation allowed through impugned Order dated 7 March 2018 pertained to the FY 2013-14 onwards. Even after lapse of almost 7 years, computation of compensation has not yet been finalised. Non-addressing clarifications sought by MSEDCL would only add uncertainty to quantification of compensation amount. Hence, the Commission has decided to address the issues raised by MSEDCL in the present matter. While doing so, the Commission will be fully cognisant of the Hon'ble APTEL judgment dated 14 September, 2020.

12. Accordingly, based on the submissions made during the hearing and documents available on record, the Commission frames following issues for its consideration:

- a. Whether SHR as specified in MYT Regulations 2011 is to be used or SHR specified in MYT Regulations notified from time to time is to be used for relevant period?
- b. Whether as received GCV is to be used as such or ceiling on degradation in GCV needs to be provided?
- c. Whether coal shortfall is to be computed with reference to actual receipt of the coal or coal offered by Coal companies which was not fully lifted by petitioner?
- d. Whether compensation on account of coal supply is to be limited to normative generation?
- e. What is the modified methodology for computing Change in Law compensation?

13. Before dealing with the above issues, the Commission would like to clarify that the Change in Law compensation allowed vide Order dated 7 March, 2018 was applicable only for FY 2013-14 to FY 2016-17. However, in all subsequent Orders dealing with the shortfall in coal supply due to SHAKTI Policy, the Commission has directed to use the methodology of computing compensation stipulated in the Order dated 7 March, 2018. Therefore, the Commission is addressing issues framed above in subsequent paragraphs in more holistic manner so that it covers period under SHAKTI Policy also.

14. Issue a: Whether SHR as specified in MYT Regulations 2011 is to be used or SHR specified in MYT Regulations notified from time to time is to be used for relevant period?

14.1 The Commission in its Order dated 7 March, 2018 has directed to use SHR submitted in Bid or as specified in MYT Regulation, 2011 whichever is lower. However, the APTEL

in its Judgment dated 14 September, 2020 has set aside the said ruling of the Commission and directed as follows:

*“7.14 From the aforesaid discussion, it emerges that this Tribunal has already held that the SHR submitted in the bid (when it is not a bid parameter as per the bidding guidelines) by a generating company is not to be used as the basis for computing the coal shortfall requirement and thereby for computation of change in law compensation to be awarded to the generating company. Such linking of change in law compensation to the SHR mentioned in the bid documents would not reconstitute the affected party to the same economic position as if the approved change in law event had not occurred. **This issue is therefore decided in favour of the Appellant and the Respondent No. 2 is directed to allow change in law compensation on the basis of the SHR specified in the MERC MYT Regulations, 2011 or the actual SHR achieved by the Appellant, whichever is lower.** This would sufficiently protect the interests of the consumers against any plant inefficiency being passed on to the Discoms or the consumers.”*

Thus, as per above judgment of the APTEL, SHR as specified in the MERC MYT Regulations 2011 or the actual SHR achieved by APML, whichever is lower shall be considered while computing Change in Law compensation.

14.2 However, MSEDCL in its reply in the present matter has stated that instead of using fixed SHR as stipulated in MYT Regulations 2011, SHR stipulated in subsequent MYT Regulations shall be used for relevant period. APML has opposed such contention as the same was never raised before the APTEL and that in its Order dated 7 March, 2018, the Commission itself has ruled that SHR will be governed by MYT Regulations 2011 only.

14.3 In this regard, the Commission notes that on the issue of SHR, its Order dated 7 March, 2018 reads as follows:

“

| <i>Parameter</i> | <i>Basis</i> |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Station Heat Rate</i> | <i>Net SHR as submitted in the Bid, or SHR and Auxiliary Consumption norms specified for new thermal Generating Stations in MYT Regulations, 2011, whichever is superior.</i> |
| <i>Reference GCV of domestic coal supply by CIL</i> | <i>Middle value of the GCV range of the assured coal grade in LoA/FSA/MoU</i> |
| <i>GCV of alternative coal</i> | <i>Actual as received</i> |

Note: The SHR specified in the MYT Regulations, 2011 will be applicable even for FY 2016-17, because, although the subsequent MYT Regulations, 2015 were in force in FY 2016-17, they treat APML's Units as "Existing Generating Station", for which the norms specified under the MYT Regulations, 2011 are applicable.” [emphasis added]

Thus, in the note below the Table in Order dated 7 March, 2018, as reproduced above, the Commission has clearly stated that even though MYT Regulations 2015 has been made effective for FY 2016-17, SHR for FY 2016-17 will still be governed by MYT

Regulations 2011 only. Admittedly, this ruling of the Commission was never challenged by any party and hence it has attained finality.

14.4 However, it is also important to note following observations of the APTEL recorded in judgment dated 14 September, 2020:

*“9.14 We would also like to add that the Supreme Court in its Judgment dated 25.02.2019 in Uttar Haryana Bijli Vitran Nigam & Anr. v. Adani Power Ltd. & Ors [(2019) 5 SCC 325] had also recognized the restitution principle for Change in Law relief. This can be fulfilled when the actuals are taken into account to compensate the Generator. **In this case, the Generator has clearly indicated that the parameters which will be beneficial to the consumers (whether as per the Regulations or the actuals, whichever is lower) will be adopted for the change in law relief.**”*
[emphasis added]

Thus, as recorded by the APTEL, APML has agreed to use parameters which are beneficial to the consumers (as per Regulations or actuals, whichever is lower).

14.5 The Commission being mandated under the Electricity Act, 2003 to lay down Regulations which also encourage efficiency improvement, it keeps on improving performance parameters such as SHR, Auxiliary Consumptions etc. in each of its MYT Regulations for new control period. While doing so, the Commission in recent Regulation has also limited loss of GCV which can be allowed through tariff. All these improved performance parameters are made applicable to new Control Period under that Regulations. Once the APML itself has agreed that parameters which are beneficial to consumers (as per Regulations or as per actual, whichever is lower) will be considered, now it cannot argue that improved performance parameters (introduced for improving efficiency & benefiting consumers) under subsequent MYT Regulations cannot be made applicable for relevant period and old parameters as stipulated under MYT Regulations 2011 needs to be used for entire period of PPA.

14.6 Hence, the Commission rules that SHR stipulated in MYT Regulations applicable for that relevant period shall be used as reference SHR. However, FY 2016-17 shall be exception for this rule and as directed in Order dated 7 March, 2018, SHR as stipulated in MYT Regulations 2011 (and not MYT Regulations 2015) shall be used as reference for FY 2016-17. Actual SHR or reference SHR as stipulated in applicable MYT Regulations, whichever is lower shall be used for computation of Change in Law compensation.

15. Issue b: Whether as received GCV is to be used as such or ceiling on degradation in GCV needs to be provided?

15.1 The Commission in its Order dated 7 March, 2018 has directed to use midpoint of GCV grade stipulated in FSA/MoU instead of as received GCV. However, the APTEL has set aside the said ruling of the Commission and directed as follows:

“8.6 From the judgments cited above, it is clear that this Tribunal as well as the CERC has consistently taken the view that the reference GCV for the purposes of change in law compensation shall be the actual GCV. We also note that the GCV specified in the tariff regulations is also the actual GCV on as received basis. MERC has not provided any reasoning or explanation as to why it considered the application of middle range of assured grade of linkage coal as the appropriate reference for computing the quantum of shortfall coal. It is a fact that there is no guidance in the PPAs or in the Bidding Guidelines as to the reference GCV that should be applied in case of change in law claims in Case 1 bid projects where SHR or GCV is not a bid parameter. However, the overarching principle for change in law compensation is that the generating company should not be left in a worse economic position. As stated above, in Wardha Power judgment (supra), this Tribunal has already rejected the reverse computation of coal price from the quoted energy charge in the bid since the coal price so calculated will not be equal to the actual price of coal and therefore, compensation for Change in Law computed on such price of coal will not restore the economic position of the Seller to the same level as if such Change in Law has not occurred. Therefore, the GCV as received shall be the appropriate basis to assess the quantum of shortfall in domestic coal and calculate the Change in law compensation accordingly.

.....
8.8 We are in agreement with the observations made by the CERC. Relegating the Appellant to the contractual remedy under the FSA when the genesis of the Appellant’s claim is Change in Law under the PPA would not be appropriate. It is, however, made clear that if the Appellant were to receive any disincentive or compensation from the coal company on account of short supply or grade slippage, such compensation will be adjusted/credited against the Change in Law compensation payable by the Respondent, MSEDCL.

8.9 For the aforesaid reasons, this issue is decided in favour of the Appellant and it is directed that the compensation for the Change in Law approved by the MERC shall be computed on the basis of actual GCV of coal received.”[emphasis added]

Thus, as per above judgment of the APTEL, Change in Law compensation shall be computed based on actual GCV of coal on as received basis.

15.2 However, MSEDCL has contended that it has observed excessively high degradation in coal GCV i.e. in the range of 1000-1100 kCal/Kg in Case of APML. Therefore, MSEDCL requests the Commission to put ceiling (275 kCal) in the degradation of coal on ARB basis in the similar way as per the generators under Section 62 of EA 2003 for protecting the interest of consumers. APML has opposed such contention of MSEDCL on the ground that this issue was never contested before the APTEL and now APTEL has clearly ruled that as received GCV needs to be allowed.

15.3 In this regard, the Commission notes that while allowing as received GCV, Hon'ble APTEL has noted that the overarching principle for change in law compensation is that the generating company should not be left in a worse economic position and further notes that MERC as well as CERC Tariff Regulations allowed as received GCV. Thus, in absence of any guidance in PPA or Bid Guidelines the APTEL has directed to use as received GCV, which is also allowed in Tariff Regulations. The Commission notes that its MYT Regulations 2011 and MYT Regulations 2015, both has allowed GCV on as received basis. Therefore, for the period governed by these Regulations, as received GCV shall be considered for computing Change in Law compensation of APML for shortfall in coal supply.

15.4 However, in MYT Regulations 2019 which has been made applicable from 1 April ,2020 onwards, the Commission has limited the difference between as billed GCV and as received GCV to 300 kCal/kg. Therefore, for period of 1 April, 2020 onwards, as received GCV with ceiling limit as allowed in MYT Regulations 2019 would need to be considered for computation of Change in Law compensation. In the opinion of the Commission this dispensation is also consistent with APTEL judgment which clearly recorded APML's readiness to use parameter which is beneficial to consumer. This aspect has already been elaborated at para 14.5 above.

15.5 Further, on the issue of considering reference GCV for coal under MoU in situations when no coal is actually received, MSEDCL has proposed following formula to arrive at as received GCV for MoU Coal:

Weighted average GCV of all contracted mines:
{(Quantity of Coal Actually received *ARB of such received coal) + (Balance Contracted quantity of coal * (ADB of coal -275 kcal to arrive at ARB)} / Total Quantity.

APML has agreed to the above-mentioned formula proposed by MSEDCL for above stated circumstances.

15.6 In this regard, the Commission notes that reference GCV of coal under FSA/MoU is important to arrive at quantum of alternate coal consumed for generation of electricity. Said reference GCV is taken from coal received at the plant. In case there is no receipt of coal, which has reported for MoU coal for some of the years, as received GCV cannot be arrived at. Under such circumstances, some proxy needs to be provided. In the formula stipulated in para above, it is proposed to reduce ADB by 275 kCal to arrive at as received GCV. As both parties agreed to the formula stated in para above, the Commission allows the same to be used under the circumstances when no actual coal is received under the MoU.

15.7 Further, MSEDCL has also contended that APML shall pass on credit notes or other benefits, if any, received from the Coal India to MSEDCL. The Commission notes that the APTEL at para 8.8. of its Judgment dated 14 September, 2020 has clearly stated that

if APML receives any compensation or incentive from coal company, same needs to pass on to MSEDCL. APML has also agreed to the same. Accordingly, the Commission rules that APML shall pass on credit notes, incentive or compensation received from coal companies to MSEDCL.

16. Issue c: Whether coal shortfall is to be computed with reference to actual receipt of the coal or coal offered by Coal companies which was not fully lifted by petitioner?

16.1 The Commission in its Order dated 7 March, 2018 has restricted compensation for actual shortfall to revised assured quantity as per amendment to NCDP 2007. However, the APTEL has set aside said ruling of the Commission and directed as follows:

“9.12 From the above decision, it is clear that the methodology for compensation in case of shortfall in domestic coal under the NCDP regime cannot be different from the methodology for compensation in case of shortfall under the SHAKTI Policy. This Tribunal has already held that the shortfall in domestic coal supply needs to be measured against 100% supply assurance contained under the NCDP 2007 and when measured against this assurance, restricting Change in law relief to the maximum of 35% to 25% for the respective four years of the 12th plan is not justified. This issue is, therefore, decided in favour of the Appellant and the Impugned Order is set aside to the extent it limits the Change in Law relief to the Appellant with reference to the maximum of (1) actual quantum of coal offered for offtake by CIL, and (2) the minimum assured quantum as per the NCDP 2013 for the respective year. We direct that the Respondent MSEDCL shall compute Change in Law compensation on the basis of actual shortfall in supply of domestic coal suffered by the Appellant from the start date approved by the MERC.” [emphasis added]

Thus, as per above judgment of the APTEL, Change in Law compensation shall be allowed for actual shortfall in coal supply without restricting to assurance under amendment to NCDP 2007.

16.2 However, MSEDCL has contended that while compensating under the Change in Law, the coal offered needs to be considered instead of coal received, as the shortfall in coal offered and coal received is on account of non-compliance by the generator. Non consideration of the coal offered may unduly burden common consumers as it will provide compensation against the default of the generator. APML has opposed such contention as same was never agitated before the APTEL and also relied upon CERC Order which specifically allowed compensation based on actual receipt of coal instead of coal offered by coal companies.

16.3 The Commission notes that this issue of coal offered vis-à-vis coal actually received by APML was agitated before this Commission during the proceeding in Case No. 189 of 2013 which resulted into Order dated 7 March, 2018. In fact, in that proceeding, while replying to the contentions of MSEDCL, APML stated as follows:

“11.17. APML denies that there has been any occasion when it had failed to lift coal despite it having been made available by SECL. Therefore, the averment is completely

hypothetical and irrelevant. Further, APMIL pays in advance for the coal to be offered by SECL in full. Therefore, any shortfall of coal thereafter is for reasons attributable to SECL/coal Companies only. Under the circumstances, the issue of lower lifting becomes redundant. Therefore, the contention of MSEDCL in this regard is baseless and unwarranted.”

Thereafter, the Commission in its Order dated 7 March, 2018, has ruled as follows:

*“72. From the CCEA decision and the consequent NCDP 2013 and MoP Advisory quoted earlier, it is clear that the shortfall in domestic coal supply by CIL for Units 1 & 2 having FSA has to be determined with reference to the minimum assured supply of 65%, 65%, 67% and 75% for the corresponding year of the 12th Plan Period. The Change in Law for these Units having FSA is to the extent that the assured quantity of coal supply has been curtailed from 100% of the normative requirement under NCDP 2007 to 65%-75% of the requirement under NCDP 2013. Hence, if in any year the actual coal supply by CIL is, say, only 50% and the minimum assured quantum for the relevant year was 75%, the shortfall in CIL supply for the purpose of Change in Law relief would be 25 % (100% earlier assured minus 75% now assured), and not 50% (100% earlier assured minus 50% actually supplied). The shortfall in actual coal supply against the revised assured quantum is a contractual matter between APMIL and CIL in the background of the NCDP 2013, and not on account of Change in Law. **The Commission also finds merit in MSEDCL’s contention that the quantum of coal offered by CIL should be considered for determining the shortfall rather than the actual off-take out of it by APMIL.** Hence, the shortfall in domestic coal supply by CIL should be assessed with reference to the maximum of (1) actual quantum of coal offered for offtake by CIL, and (2) the minimum assured quantum as per the NCDP 2013 for the respective year.” [emphasis added]*

Hence, the Commission had upheld MSEDCL’s contention that quantum of coal offered by the Coal companies shall be considered while computing coal shortfall. But APMIL challenged the said para 72 of the Order dated 7 March, 2018 in Appeal and Hon’ble APTEL has ruled that actual shortfall in domestic coal supply needs to be compensated.

16.4 This issue of compensation based on actual shortfall in coal receipt has been further elaborated by the Hon’ble APTEL in Judgment dated 13 November , 2020 in Appeal No. 264 of 2018 (Rattan India Power Ltd. Vs MERC & Others). Relevant part of APTEL Judgment is elaborated below:

*“65. As was explained elaborately at the hearing, the generator (appellant), for the purpose of billing and accounting of coal consumption for a given month works out the **difference between monthly assured quantum of FSA coal and actual FSA coal received** and thereafter makes up the difference by utilizing alternate coal, carrying forward the excess coal (FSA or alternate) to the next month so as to claim compensation on the basis of actual generation, the respondent procurer (MSEDCL) being billed only for the actual shortfall, the Bills raised reflecting details of shortfall*

of FSA coal in the month as indeed the quantity of Alternate coal used to make up the shortfall

.....
69. *Some of the relevant clauses of FSA have been quoted earlier. There is no logic in argument that linkage coal is to be set-off against alternate coal. **Where shortfall has occurred and the generator has already procured and used alternate coal, setting off or adjusting the same will be contrary to the FSA since in terms of Clause 4.1 (definition of Annual Contracted Quantity), 4.4 (definition of Quarterly Quantity) and 4.5 (definition of Scheduled Quantity) of the FSA, the quantum of coal to be supplied every month and quarter is predetermined and there is no provision for setting-off alternate coal with linkage coal.***”

Thus, APTEL has recognised alternate coal based on actual shortfall (receipt of domestic coal) for generation of electricity. In view of such clear ruling of the APTEL, the Commission cannot allow MSEDCL’s request of computing coal shortfall with respect to coal offered by the coal companies.

16.5 Accordingly, the Commission rules that APML shall be entitled for Change in Law compensation towards actual shortfall in domestic coal supply as assured under NCDP 2007.

17. Issue d: Whether compensation on account of coal supply is to be limited to normative generation?

17.1 MSEDCL has requested the Commission to clarify and hold that scheduled generation shall be restricted to normative generation only. It stated that any generation of normative level need not be compensated as it is commercial decision of the generator. APML has opposed this contention of MSEDCL and stated that Change in Law needs to be allowed based on actual generation.

17.2 The Commission notes that this issue was raised by MSEDCL in Case No. 132 of 2020 and the Commission vide its Order dated 28 November, 2020 ruled on it as follows:

“21.3.....
c. In this regard, the Commission notes that methodology for computing Change in Law compensation stipulated under Order dated 7 March 2018 started with ‘Scheduled Generation at Interconnection Point’. Nowhere in the Order, the Commission has linked scheduled generation as normative generation. In fact, while laying down checks & balances in computing coal shortfall, the Commission has linked compensation with actual generation as follows:

“75.
*(a) If the actual domestic coal quantum offered by CIL was sufficient for meeting the **requirement for actual generation by the Units** at normative parameters, no shortfall in CIL supply shall be deemed to have occurred.” [emphasis added]*

Therefore, it is incorrect on the part of MSEDCL to claim that schedule generation in computation formula is generation linked to normative availability. Said generation is actual generation scheduled by Generator at interconnection point as approved by SLDC.

d. However, on the issue of providing compensation for generation above normative PLF, the Commission notes that compensation for coal shortfall is allowed with reference to assurance in NCDP 2007. Said assurance is with reference to ACQ and such ACQ is computed based on normative availability/PLF. Therefore, NCDP 2007 which was reference document for allowing Change in Law compensation has assured coal supply only upto normative availability / PLF. Therefore, the Commission clarifies that any generation above normative PLF on annual basis would not be eligible for any compensation on account of coal shortfall.”

Thus, the Commission has already ruled that any generation above the normative PLF on annual basis would not be eligible for any compensation on account of coal shortfall.

18. Issue e: What is the modified methodology for computing Change in Law compensation?

18.1 The Commission notes that its Order dated 7 March, 2018 has stipulated methodology for computing Change in Law compensation in tabular form separately for capacity tied up under PPAs from 1180 MW Capacity having LOA/FSA and for the capacity of 1320 MW having MoU.

18.2 APML and MSEDCL has suggested changes in these tabular formats which have been summarised in earlier part of this Order. Based on APTEL Judgment dated 14 September, 2020 and issues raised during the present proceeding, the Commission has clarified some of the aspect of relating to computation of compensation. Based on these ruling, tabular methodology stipulated in the Order dated 7 March ,2018 needs to be modified.

18.3 Accordingly, Table providing computation of compensation for PPAs having LOA /FSA needs to be modified as follows:

A) For Capacity tied up under PPAs from 1180 MW capacity having LOA/FSA

| Particulars | Legend | Units | Value |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|-------|
| Scheduled Generation at interconnection point | A | kWh | |
| Net SHR as submitted in the bid or SHR and Auxiliary consumption norms specified for new thermal Generating Stations in MYT Regulations, 2011 (till FY 2016-17) and thereafter as per relevant MYT Regulations or actual, whichever is superior | B | kcal/kWh | |
| Total Heat Content required | C= A x B | kcal | |
| Reference GCV of the coal grade assured in the applicable LoA/FSA (In case range is specified, middle value of the GCV range of the assured coal grade) Actual GCV of coal received at the plant | D | kcal/kg | |

| Particulars | Legend | Units | Value |
|------------------------------------------------------------------------------------------------|--------------------------------------|---------|-------|
| (ARB till FY 2019-20. Thereafter difference between ADB & ARB shall not be more than 300 kCal) | | | |
| Total coal required at the reference <u>actual</u> GCV | $E = C/D$ | kg | |
| Minimum assured CIL coal supply under LoA/FSA as per NCDP 2013 | F | | |
| | $G = E \times F$ | | |
| Actual coal offered by <u>received from</u> CIL under the LoA/FSA | F | kg | |
| Coal available under LoA/FSA | $J =$ Maximum of G and I | kg | |
| Shortfall in CIL coal supply under LoA/FSA | $K = E - J$ $G = E - F$ | kg | |
| Heat Value of shortfall in CIL coal supply under LoA/FSA | $L = K \times D$ $H = G \times D$ | kcal | |
| GCV of alternative coal (as received) | M I | kcal/kg | |
| Alternative coal quantum required to meet the shortfall | $N = L \div M$ $J = H \div I$ | kg | |
| Landed price of LoA/FSA coal | $O - K$ | Rs./kg | |
| Landed price of alternative coal as per indices/benchmarks (given in Table below) | P L | Rs./kg | |
| Cost of shortfall in FSA quantity at Base Price | $Q = K \times O$ $M = K \times G$ | Rs | |
| Cost of alternative coal allowable towards shortfall | $R = N \times P$ $N = L \times J$ | Rs. | |
| Impact of Change in Law | $S = R - Q$ $O = N - M$ | Rs. | |
| Impact of Change in Law per Unit | $T = S / A$ $P = O / A$ | Rs./kWh | |

The above table after incorporating the changes as shown above is given below. Same shall be used for computing change in law compensation for PPA having LOA/FSA:

A) For Capacity tied up under PPAs from 1180 MW capacity having LOA/FSA

| Particulars | Legend | Units | Value |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------|-------|
| Scheduled Generation at interconnection point | A | kWh | |
| SHR and Auxiliary consumption norms specified for new thermal Generating Stations in MYT Regulations, 2011 (till FY 2016-17) and thereafter as per relevant MYT Regulations or actual, whichever is superior | B | kCal/kWh | |
| Total Heat Content required | $C = A \times B$ | kCal | |
| Actual GCV of coal received at the plant (ARB till FY 2019-20. Thereafter difference between ADB & ARB shall not be more than 300 kCal) | D | kCal/kg | |
| Total coal required at the actual GCV | $E = C/D$ | kg | |
| Actual coal received from CIL under the LoA/FSA | F | kg | |
| Shortfall in CIL coal supply under LoA/FSA | $G = E - F$ | kg | |

| Particulars | Legend | Units | Value |
|-----------------------------------------------------------------------------------|------------------|---------|-------|
| Heat Value of shortfall in CIL coal supply under LoA/FSA | $H = G \times D$ | kCal | |
| GCV of alternative coal (as received) | I | kCal/kg | |
| Alternative coal quantum required to meet the shortfall | $J = H \div I$ | kg | |
| Landed price of LoA/FSA coal | K | Rs./kg | |
| Landed price of alternative coal as per indices/benchmarks (given in Table below) | L | Rs./kg | |
| Cost of shortfall in FSA quantity at Base Price | $M = K \times G$ | Rs | |
| Cost of alternative coal allowable towards shortfall | $N = L \times J$ | Rs. | |
| Impact of Change in Law | $O = N - M$ | Rs. | |
| Impact of Change in Law per Unit | $P = O / A$ | Rs./kWh | |

18.4 Similarly, Table providing computation of compensation for PPAs having MoU needs to be modified as follows:

B) For Capacity tied up under PPAs from 1320 MW capacity having MoU

| Particulars | Legend | Units | Value |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|----------|-------|
| Scheduled Generation at interconnection point | A | kWh | |
| Net SHR as submitted in the bid or SHR and Auxiliary consumption norms specified for new thermal Generating Stations in MYT Regulations, 2011 (till FY 2016-17) and thereafter as per relevant MYT Regulations or actual, whichever is superior | B | kcal/kWh | |
| Total Heat Content required from coal | $C = A \times B$ | kcal | |
| Reference GCV of coal grade as per MoU (In case range is specified, middle value of the GCV range of the assured coal grade) Actual GCV of coal received at the plant (ARB till FY 2019-20. Thereafter difference between ADB & ARB shall not be more than 300 kCal) | D | kcal/kg | |
| Total coal required at reference <u>actual</u> GCV | $E = C/D$ | kg | |
| Maximum assured quantum of coal in MoU | F G | | |
| Actual coal offered by CIL under the MoU | H I | % Kg | |
| Actual Coal offered by <u>received from</u> CIL under MoU | $J = I \times F$ | | |
| Shortfall in CIL coal supply under MoU | $K = E - J$ $G = E - F$ | kg | |
| Heat Value of shortfall in CIL coal supply under MoU | $L = K \times D$ $H = G \times D$ | kcal | |
| GCV of alternative coal (as received) | M I | kcal/kg | |
| Alternative coal quantum to meet shortfall | N = L : M $J = H \div I$ | kg | |
| Landed price of coal under MoU | O K | Rs./kg | |

| Particulars | Legend | Units | Value |
|--------------------------------------------------------------------------------------------|--------------------------------------------------|--------|-------|
| Landed price of linkage coal for the same Grade of coal as offered in MoU | P L | Rs./kg | |
| Landed price of alternative coal as per indices/benchmarks (given in Table below) | Q M | Rs./kg | |
| Cost of shortfall in MoU quantity at Base Price (linkage coal price) | $R = K \times P$ $N = G \times L$ | Rs | |
| Cost of alternative coal allowable towards shortfall | $S = N \times Q$ $O = J \times M$ | Rs. | |
| Impact of Change in Law for shortfall in Quantity | $T = S - R$ $P = O - N$ | Rs. | |
| Impact of Change in Law for quantity supplied under MoU with respect to linkage coal price | $U = J \times (O - P)$ $Q = F \times (K - L)$ | Rs. | |
| Total Impact of Change in Law | $V = T + U$ $R = P + Q$ | | |
| Impact of Change in Law per Unit | $W = V / A$ $S = R / A$ | | |

The above table after incorporating the changes as shown above is given below. Same shall be used for computing change in law compensation for PPA having MoU:

B) For Capacity tied up under PPAs from 1320 MW capacity having MoU

| Particulars | Legend | Units | Value |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------|-------|
| Scheduled Generation at interconnection point | A | kWh | |
| SHR and Auxiliary consumption norms specified for new thermal Generating Stations in MYT Regulations, 2011 (till FY 2016-17) and thereafter as per relevant MYT Regulations or actual, whichever is superior | B | kcal/kWh | |
| Total Heat Content required from coal | $C = A \times B$ | kcal | |
| Actual GCV of coal received at the plant (ARB till FY 2019-20. Thereafter difference between ADB & ARB shall not be more than 300 kcal) | D | kcal/kg | |
| Total coal required at actual GCV | $E = C / D$ | kg | |
| Actual Coal received from CIL under MoU | F | | |
| Shortfall in CIL coal supply under MoU | $G = E - F$ | kg | |
| Heat Value of shortfall in CIL coal supply under MoU | $H = G \times D$ | kcal | |
| GCV of alternative coal (as received) | I | kcal/kg | |
| Alternative coal quantum to meet shortfall | $J = H \div I$ | kg | |
| Landed price of coal under MoU | K | Rs./kg | |
| Landed price of linkage coal for the same Grade of coal as offered in MoU | L | Rs./kg | |
| Landed price of alternative coal as per indices/benchmarks (given in Table below) | M | Rs./kg | |
| Cost of shortfall in MoU quantity at Base Price (linkage coal price) | $N = G \times L$ | Rs | |

| Particulars | Legend | Units | Value |
|--------------------------------------------------------------------------------------------|------------------------|-------|-------|
| Cost of alternative coal allowable towards shortfall | $O = J \times M$ | Rs. | |
| Impact of Change in Law for shortfall in Quantity | $P = O - N$ | Rs. | |
| Impact of Change in Law for quantity supplied under MoU with respect to linkage coal price | $Q = F \times (K - L)$ | Rs. | |
| Total Impact of Change in Law | $R = P + Q$ | | |
| Impact of Change in Law per Unit | $S = R/A$ | | |

18.5 Approved Indices / Benchmarks for imported coal and Domestic coal shall be as stipulated under Order dated 7 March, 2018.

19. As ruled in forgoing paragraphs, to comply with Hon'ble APTEL Judgment dated 4 September 2020, the Commission has modified methodology of computing compensation for Coal shortfall stipulated in Order dated 7 March, 2018. While doing so, the Commission directs the parties to use reference parameter from Tariff Regulations applicable for relevant period (only exception is SHR for FY 2016-17) or actual, whichever is lower for computing compensation. Tariff Regulations are updated for each Control Period with performance parameters that intend to promote incremental efficiency improvement in generator performance and share the benefit therefrom with the consumers as well. Such Tariff Regulations are normally applicable for generators having PPA under Section 62 of the EA 2003. However, in the present matter, as computation of compensation requires reference parameters which are not stipulated in the Bid or Competitive Bidding Guidelines, parameters stipulated in Tariff Regulations have been used as reference. APML has already consented to use reference parameters as per Regulations or actual, whichever is lower. Otherwise also, as per PPA provisions, APML is mandated to adopt prudent utility practices which in the opinion of Commission can only be verified in the parameters stipulated for the generators employing similar technology. Thus, use of parameters (SHR, Aux. Consumption and GCV) as stipulated in the relevant MYT Regulations and allowing compensation based on such reference parameter or actual whichever is superior will balance the interest of all parties i.e. APML will get prudent compensation and consumer will not be required to pay for inefficiencies, if any, of APML.

20. Change in Law compensation allowed in Order dated 7 March, 2018 would need to be recomputed based on the above-mentioned ruling of the Commission. Therefore, the Commission directs MSEDCL to complete such re-computation on priority and conclude the same within 2 months of this order. APML shall support the MSEDCL in this process and provide necessary data on priority.


21. Hence, the following Order:

ORDER

1. Commission's Order dated 7 March,2018 in Case No. 189 of 2013 & 140 of 2014 stands modified to the extent as ruled in the foregoing paragraphs relating to analysis and ruling on the issues framed for the consequential order as per APTEL Judgment dated 14 September 2020 in Appeal No 182 of 2019.
2. Change in Law compensation allowed in Order dated 7 March, 2018 needs to be recomputed based on change in methodology approved in this Order. Maharashtra State Electricity Distribution Co. Ltd. to complete such re-computation on priority within 2 months. Adani Power Maharashtra Ltd shall support this process of re-computation and provide necessary data on priority.
3. MA No. 53 of 2020 is disposed of, accordingly.

Sd/-
(Mukesh Khullar)
Member

Sd/-
(I.M. Bohari)
Member


(Abhijit Deshpande)
Secretary

