

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SITE NO. 3, BLOCK B, SECTOR 18-A, MADHYA MARG, CHANDIGARH

Petition No. 02 of 2023
& IA No. 10 of 2023
Date of Order: 21.09.2023

Petition under Section 86 (1) (b) and (f) of Electricity Act, 2003 read with Article 13 of the PPA dated 01.09.2008 executed between Talwandi Sabo Power Ltd. and Punjab State Power Corporation Ltd. for approval and consequent tariff adjustment as sought by the Petitioner due to 'Change in Law' event viz. introduction of Ministry of Power's notification dated 08.10.2021, i.e. 'Revised Policy for Biomass Utilisation for Power Generation through Co-firing in Coal based power plants' and directions issued by Commission for Air Quality in National Capital Region and Adjoining Areas, resulting in additional capital and operational expenditure for the Petitioner.

AND

In the matter of: Talwandi Sabo Power Limited, Mansa-Talwandi Sabo Road, Village Banawala, District Mansa, Punjab – 151302
..Petitioner

Versus

Punjab State Power Corporation Limited, through its CMD, PSEB Head Office. The Mall, Patiala, Punjab
....Respondent

Commission: Sh. Viswajeet Khanna, Chairperson
Sh. Paramjeet Singh, Member

Petitioner: Sh. Vishrov Mukherjee, Advocate

PSPCL: Ms. Poorva Saigal, Advocate

ORDER

1. The Petitioner has filed the present petition seeking declaration of 'Change in Law' event in terms of Article 13 of the PPA dated 01.09.2008 and in-principal approval for consequent compensation through tariff adjustment on account of additional costs required to be incurred for implementation of Biomass co-firing mandated by directions issued under the CAQM Act and MoP Policy dated 08.10.2021. Submissions made in the petition are summarised as under:
 - 1.1 The Petitioner/TSPL is a generating company which owns and operates a 1980 MW (3x660 MW) Thermal Power Project (Project) allocated in a Case 2 Scenario 4 of the competitive bidding process, where under the energy charges are a complete pass through as the bidder was only required to quote Capacity Charges and Net Quoted Station Heat Rate (**SHR**).
 - 1.2 The Commission for Air Quality Management (**CAQM**) set up under the CAQM Act, 2021 for protecting and improving the quality of air in the NCR and Adjoining Areas has issued Direction No. 42 of 2021 on 17.09.2021 under Sections 12(1) read with 12(2)(xi) of the CAQM Act directing all coal based Thermal Power Plants (TPP) situated within a radius of 300 kms of Delhi to initiate immediate steps to co-fire biomass-based Pellets, Torrefied Pellets/ Briquettes up to 5-10% with Coal through a continuous and uninterrupted supply chain. Subsequently, on 08.10.2021 MoP issued the Revised Policy for Biomass Co-firing directing coal-based TPPs with ball and tube mills

such as TSPL to mandatorily use 5% blend of torrefied biomass pellets with volatile content below 22% along with coal.

- 1.3 As a consequence, it has become mandatory for TSPL to use 5% blend of torrefied biomass pellets with volatile content below 22%, primarily made of agri residue along with coal on an annual basis. However, considering the limited availability of torrefied biomass pellets in India, TSPL is constrained to use non-torrefied biomass pellets along with coal to comply with Ministry of Power (MoP) and CAQM directions on co-firing biomass. This will require major modifications/ retrofitting in the boilers and other equipment including installation of new type of mills suitable for co-firing of non-torrefied biomass pellets.
- 1.4 On 25.10.2021, TSPL wrote to MoP seeking exemption from co-firing of biomass, whereon CEA (MoP) vide letter dated 14.12.2021 replied that TSPL may consult the OEM and come out with enablers (including necessary modifications in operational protocols as well as equipment/ systems, as required after a study while taking care of all aspects including safety) so that the mandated percentage of co-firing as per the MoP Policy is made possible within the stipulated timeframe.
- 1.5 In the meanwhile, on 01.12.2021, TSPL issued a 'Change in Law' Notice to PSPCL under Article 13.3 of the PPA citing the CAQM's Direction dated 17.09.2021 and MoP's Policy dated 08.10.2021. It was stated that TSPL is in the process of finalizing a consultant for evaluation of technology/ equipment required and the financial implication in terms of additional recurring/ non-recurring expenditure due to the Revised Policy for Biomass Co-firing and that it will

subsequently inform PSPCL about its impact on the existing tariff under the PPA, which shall be passed on to PSPCL in accordance with Article 13 of the PPA (i.e., 'Change in Law). Vide subsequent communications also; the Petitioner kept on informing PSPCL about the developments in the matter and requesting for PSPCL's participation in its tendering process.

1.6 On 25.03.2022, PSPCL wrote to TSPL in response to its 'Change in Law' Notice dated 01.12.2021 inter-alia suggesting that TSPL can firm up the proposal and file a Petition before the Commission, giving the details of sourcing of biomass pellets and cost implications thereof and seek the necessary approval.

1.7 On 29.10.2022, TSPL wrote to PSPCL stating as under:-

“(a) All TPPs having ball and tube mills (including TSPL) were exempted from usage of biomass for power generation as per MoP's Policy for Biomass, 2017 dated 17.11.2017. However, as per the Revised Policy for Biomass Co-firing issued by MoP on 08.10.2021, all coal-based TPPs including TSPL with ball and tube mills have to mandatorily use 5% blend of torrefied biomass pellets with volatile content below 22%, primarily made of agro residue along with coal for power generation.

(b) Since the introduction of the revised policy for biomass utilisation requires additional recurring/ non-recurring expenditure for generation of power, TSPL vide its letter no. TSPL/PSPCL/PPR/AK/DEC-21/164 dated 01.12.2021 issued "Change in Law" Notice under Article 13.3 of the PPA to PSPCL stating that the actual financial impact due to enactment of the above notification/ policy, shall be passed on to PSPCL in accordance with Article 13 "Change in Law" of the PPA.

- (c) Subsequently, TSPL engaged Tata Consulting Engineers (TCE) for evaluation of technology/ equipment required, and the financial implication in terms of additional recurring/ non-recurring expenditure due to modifications in the aforesaid revised MoP Policy. Upon preliminary evaluation, it has been reported by TCE, that TSPL would require modification of its mills and boilers to utilize non-torrefied biomass pellets, currently available in the market.
- (d) In compliance with MoP's policy, with the technical capability of as-is usage of torrefied biomass pellets, TSPL floated a tender for supply of agro-based residue biomass torrefied pellets, timelines for which were extended numerous times. However, in response to both short/ long-term supply tenders floated, TSPL has neither received any bids from the suppliers nor any communication showcasing interest to supply agro-based residue biomass torrefied pellets.
- (e) Further, TSPL has explored all plausible avenues to procure biomass torrefied pellets. However, in the absence of any interested suppliers of biomass torrefied pellets, to comply with the MoP Policy, TSPL intends to exercise the only available option of procuring and using non-torrefied biomass pellets. However, since TSPL's mills are not suited for the use of non-torrefied or other kinds of biomass pellets, TSPL would require modifying its mills and boilers to accommodate their use. To effect the same, TSPL shall be conducting a feasibility study to analyse and explore the ways of modifications in the mills and boilers.
- (f) TSPL further reiterates that the actual financial implications due to such modifications for enactment of the MoP Policy shall be passed on to PSPCL in accordance with the Article 13 "Change in Law" of the PPA dated 01.09.2008.

(g) TSPL requested for PSPCL's inputs/ comments on the said action plan."

- 1.8 The CAQM, National Biomass Mission/MoP and PPCB have been regularly following up with TSPL for immediate compliance of the directive through a continuous and uninterrupted supply chain and to expedite the steps for incorporating the biomass in co-firing with coal without any delay.
- 1.9 In view of the foregoing and subsequent discussions with TCE, TSPL is left with no other option but to retrofit/ modify its existing setup (boiler, ball and tube mills, etc.) to be able to utilise non-torrefied pellets. Once modified, TSPL's Project would be able to utilise both non-torrefied and torrefied pellets. Accordingly, TSPL is mandated to incur the following costs:

S. No.	Costs to be incurred by TSPL	Estimated Costs / Change in Parameters
1.	One-time Capital Expenditure towards retrofits/ modification of boilers, etc., installation of biomass handling system and new coal mills to be able to utilise non-torrefied biomass pellets along with torrefied pellets	Rs. 867 Cr. [i.e., 17 Cr. (biomass handling system) + 850 Cr. (modification of Boilers/Mills)]
2.	Recurring Operating Expenditure towards procurement of non-torrefied biomass pellets (on annual basis)	Rs. 397 Cr.
3.	Increase in Auxiliary Power Consumption	Approx by 15%
4.	Increase in Station Heat Rate	Approx by 1%
5.	Interest in Working Capital Requirements	Actuals/CERC benchmark (whichever is higher).
6.	Deemed Capacity Charges for period of Shutdown for retrofits/ modifications of boilers etc., installation of biomass handling system and new coal mills	To be claimed on actuals.
7.	Other recurring annual operating expenditure to be incurred due to the above modification/ installation	To be claimed on actuals

The cost/expenditure estimated above is based on preliminary studies carried out by TCE on behalf of TSPL. However, the actual

adjustment of tariff shall be based on actual investment made/cost incurred by TSPL and subject to prudence check by the Commission.

- 1.10 The aforesaid costs/ expenditure is required to be passed on to PSPCL as per 'Change in Law' clause of the PPA dated 01.09.2008. Therefore, the Commission is requested to grant in-principal approval of the costs to be incurred by TSPL and for pass through of the same to PSPCL as per the PPA especially since the amounts incurred are substantial and no bank/ lending institution is likely to invest such amounts without regulatory certainty/ prior approval of the Commission and to ensure that TSPL is put into the same economic position as if such Change in Law event had not occurred.

1.11 PRAYER

In view of the foregoing, it is prayed to: -

- (a) Hold and declare that Ministry of Power's Notification dated 08.10.2021, i.e., 'Revised Policy for Biomass Utilisation for Power Generation through Co-firing in Coal based Power Plants' constitutes a Change in Law event qua TSPL in terms of Article 13 of the PPA dated 01.09.2008;*
- (b) Grant in-principal approval for:-*
- (i) Total capital expenditure of Rs.867Crores to be incurred by TSPL;*
- (ii) Recurring operating expenditure of Rs. 397 Crore towards procurement of non-torrefied biomass pellets for usage of biomass as co-fuel in terms of the Energy Charges formula contained in Schedule 7 of the PPA dated 01.09.2008.*
- (c) Allow increase in Net Quoted Heat Rate by 1% on account of the utilization of biomass as co-fuel, after blending with coal;*

- (d) *Approve increase in Auxiliary Power Consumption by 15% in milling power on account of usage of more fuel, which will have an impact on the Energy Charges;*
- (e) *Approve other recurring annual operating expenditure to be incurred by TSPL due to the above modification/ installation (on actuals);*
- (f) *Allow/ grant TSPL interest on working capital requirements to be claimed on actuals/ as per CERC benchmark (whichever is higher) for:-*
 - (i) *Working capital requirements for stocking of two months' worth biomass pellets at the Project site.*
 - (ii) *Additional receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor.*
 - (iii) *Additional Operation and maintenance expenses for two months.*
- (g) *Allow payment of Deemed Capacity Charges for the shutdown period required modification/ installation at the Project (on actuals).*
- (h) *Devise appropriate norms for computing the adjustment in tariff to offset the additional investment/ increase in costs due to Ministry of Power's Notification dated 08.10.2021, i.e., 'Revised Policy for Biomass Utilisation for Power Generation through Co-firing in Coal based Power Plants' for restituting TSPL to the same economic position as if such Change in Law event had not occurred;*
- (i) *Grant liberty to claim compensation and tariff adjustment based on actual cost incurred by the Petitioner, subject to prudence check by this Hon'ble Commission.*
- (j) *Pass any such other and further reliefs as this Hon'ble Commission deems just and proper in the nature and circumstances of the present case."*

2. The Petition was taken up for admission on 28.04.2023. The Ld. Counsel for the petitioner prayed for admission of the petition. However, Ld. Counsel appearing for PSPCL objected to the maintainability of the petition and sought time to file its reply on the same. Vide Order dated 07.05.2023, PSPCL was directed to file its reply within two weeks with a copy to the Petitioner.
3. PSPCL filed its reply to the petition on 19.05.2023. PSPCL's reply is summarized as under:
 - 3.1 The Direction No. 42 issued by the Commission for Air Quality Management (**CAQM**) for the use of biomass pellets in coal based thermal plants constitutes a Change in Law within the meaning of Article 13 of the PPA. TSPL is entitled to compensation on account of the Change in Law event, but only after the amount has been incurred and approved by the Commission after prudence check to discard any unnecessary or imprudent expenses. Further, the amount incurred has to be in excess of the threshold criteria laid down in Article 13.2(b).
 - 3.2 However, the Petitioner's prayer to seek in-principle approval for expenditure to be incurred by TSPL is not in accordance with the terms of the PPA. Article 13.2 of the PPA provides for the compensation for any change in cost to TSPL to be determined and effective from such date as decided by the Appropriate Commission. Thus, the compensation on account of same is payable only after the expenditure has been incurred and if it exceeds the threshold criteria laid down in Article 13.2(b). In the absence of any actual data, the Commission cannot conduct any

prudence check on the additional expenditure/ implications on account of a Change in Law. Therefore, TSPL's prayer for seeking in-principle approval of the expenditure that is yet to be incurred is not tenable.

3.3 In view of the recommendations made in the meeting convened by the Ministry of Power on 14.09.2022, TSPL forwarded its tender documents for assessment, where on, the National Biomass Mission provided its comments that the deviations from the Model Contract as pointed out there under were possibly acting as the deterrent clause for low participation/response to the tender and recommended that TSPL may review its Tender based on the comments given by the Mission.

3.4 However TSPL relying on the report submitted by TCE, which states that in view of the less availability of torrefied pellets co-firing through the existing ball & tube mills is not a favourable option, has proceeded to seek approval of capital expenditure for retrofitting/modifying the existing boilers and replacement of ball & tube mill system to enable use of non-torrefied pellets. As such, the entire premise of the Petition (including the estimated capital expenditure etc.) is that TSPL shall proceed to procure non-torrefied pellets.

3.5 The said premise, is contrary to provisions of the Policy dated 08.10.2021 issued by the Ministry of Power, where the specific mandate for the thermal power plants having ball & tube mill (such as TSPL) is to use Torrefied biomass pellets. It is not open for TSPL to unilaterally change the scope of the Policy. The relevant clause of the Policy is reproduced below:

“3. (iii) All coal based thermal power plants of power generation utilities with ball & tube mills, shall on annual basis mandatorily use 5 % blend of torrefied biomass pellets with volatile content below 22% primarily made of agro residue along with coal.”.

3.6 Therefore, the capital expenditure to the tune of Rs. 850 Crore sought by TSPL for installation of new coal mills and modification/retrofitting in the existing boilers is not in-line with the MoP Policy dated 08.10.2021. Further, TSPL is also seeking deemed capacity charges for shutdown of 4-6 months for installation of new coal mills and modifications/retrofitting in the existing boilers, which shall amount to Rs. 430 to 640 crores (approx). The said capital expenditure including the ancillary implications (shutdown period etc.) are not admissible. Further, the estimates provided therein are also not correct and cannot be considered in the present proceedings.

3.7 Even otherwise, with an improvement in the availability of torrefied biomass pellets, TSPL need not incur such huge costs in the nature of capital expenditure on installation of new coal mills and modification/retrofitting of boilers. The premise that torrefied pellets are not available is not true. In its recent tender, TSPL has received response from 5 vendors for supply of torrefied pellets, though the same could not mature due to a procedural irregularity in the bid submission (tenders were submitted via offline mode instead of online mode). Now, TSPL is in the process of floating a fresh tender for the procurement of torrefied biomass pellets. This clearly indicates the availability of torrefied biomass pellets for TSPL's Thermal Power Plant.

- 3.8 Insofar as the capital implication of setting up a Biomass Handling System (estimated to be Rs 17 crores), PSPCL submits that the quantification of the purported increase in cost on account of the capital expenditure limited to the extent of installation of the Biomass Handling System may be undertaken only after the same has been incurred and subject to a prudence check by the Commission. The Petitioner may be directed to involve PSPCL in the tendering process to be initiated by them for installation of Biomass Handling System right from the beginning.
- 3.9 As regards the Station Heat Rate (**SHR**), TSPL has assumed a 1% decrease in boiler efficiency on account of use of biomass pellets and is claiming the consequential impact on the SHR from 2400 kCal/kWh to 2424 kCal/kWh. Further, TSPL has also assumed a 15% increase in Auxiliary Power Consumption attributable to blending of 5% biomass pellets. It is submitted that, the data provided is not sufficient. Further, the configuration, technology and vintage of thermal power plants are plant specific and the implications of blending 5% torrefied biomass pellets on the SHR and Auxiliary Power Consumption can only be determined on actual co-firing. Accordingly, the estimated cost incurred on account of a change in SHR and/or Auxiliary Power Consumption must be established by TSPL and subjected to a prudence check by the Commission.
- 3.10 With respect to the O&M expenses in the use of torrefied biomass pellets, it is submitted that the implications of a 5% reduction in the coal usage by TSPL on account of co-firing of 5% biomass pellets should also be considered and only the

incremental amount be sought by TSPL. Further, any O&M expenses to be incurred in procurement of torrefied biomass pellets shall be subject to PSPCL being allowed to participate in the tender process, and thereafter, a prudence check by the Commission. Accordingly, any payment towards O&M expenses by PSPCL must be made after taking into account the benefits that accrue to TSPL due to a reduction in amount of the coal quantum used by TSPL.

3.11 It is relevant to note that, in Petition No. 32 of 2022 filed by PSPCL for consideration of additional cost on account of use of Biomass Pellets in its plants, the Commission vide Order dated 27.10.2022, had allowed for the pass through of the final cost on the basis of actual accurate data on pricing of pellets and other factors. This clarifies that the extent of compensation is to be determined on the basis of actual expenditure to be incurred by PSPCL, subject to a prudence check by the Commission.

3.12 Further, the compensation in case of a Change in Law under Article 13 is payable only if the expenditure incurred on account of Change in Law exceeds the threshold criteria laid down in Article 13.2(b) of the PPA. At present the threshold limit is Rs. 44.83 Crore (i.e. 1% of 186.81x24) as PSPCL has provided Letter of Credit amounting Rs.186.81 Crores to TSPL rolling fortnightly (15 days).

3.13 Also, the Revised Policy dated 08.10.2021 makes it clear that the purchase of power through the co-firing will be considered towards fulfilment of RPO of the concerned Distribution Company. Since PSPCL is the sole beneficiary of the power

generated from TSPL, the power purchase through co-firing of biomass pellets shall accrue towards the Renewable Purchase Obligation of PSPCL. Therefore, TSPL shall be required to submit the requisite information/data to PSPCL and/or PEDDA for taking into account the energy produced from biomass pellets while co-firing with coal. TSPL shall also update the stock position of biomass pellets on its website and shall provide it to PSPCL, as requested.

4. On 30.06.2023, the Petitioner also filed an IA No. 10 of 2023, reiterating its earlier submissions and stating that without prejudice to its case in the petition, it is submitted that in subsequent competitive bidding conducted in the presence of PSPCL's representative, TSPL has received bids for supply of torrefied pellets under short-term and long-term contracts, it has been prayed to:

- “(a) Hold and declare that Ministry of Power’s Notification dated 08.10.2021, i.e., ‘Revised Policy for Biomass Utilisation for Power Generation through Co-firing in Coal based Power Plants’ and Commission for Air Quality’s direction dated 17.09.2021 constitutes a Change in Law event for TSPL in terms of Article 13 of the PPA dated 01.09.2008;*
- (b) Grant in-principal approval for procurement and usage of torrefied pellets for generation and supply of power to PSPCL under the PPA;*
- (c) Grant in-principal approval for pass through of the resultant cost/expenditure to be incurred by TSPL towards procurement and utilization of torrefied pellets to PSPCL in terms of the PPA.*
- (d) Pass any such other and further reliefs as this Hon’ble Commission deems just and proper in the nature and circumstances of the present case.”*

5. In the hearing held on 12.07.2023, after hearing the parties, the petition was admitted, with directions that PSPCL may file any additional reply/submissions on merits with a copy to the Petitioner and the Petitioner may file rejoinder thereto, if any. Further, on the issue of the IA filed by the Petitioner, the counsel for PSPCL submitted that granting relief as sought thereunder amounts to granting relief in the main petition. Accordingly, PSPCL was directed to file its reply to the IA with a copy to the Petitioner.
6. The Petitioner filed its rejoinder to PSPCL's reply dated 19.05.2023. While reiterating its earlier submissions it was further submitted that:
- 6.1 At the time of filing of the present Petition, torrefied pellets were unavailable. However, in subsequent competitive bidding conducted by TSPL, bids have been received for supply of torrefied pellets. Representative from PSPCL had also participated in the bidding process. For procurement of torrefied biomass pellets, 4 bidders each participated in short-term and long-term tenders:
- a) In the long-term Tender floated on 17.05.2023, the maximum quantity assured by L1 bidder/ vendor is 100 Metric Tonnes Per Day (**MTPD**). Pursuant thereto, TSPL has issued the Letter of Intent (**LoI**) dated 19.06.2023 to Cognoscente Invnted Pvt. Ltd. (**CIPL**) for Long Term Supply of Agro Based Torrefied Biomass Pellets. Delivery of same is to start within 270 days of issuance of purchase order.
 - b) In the short-term Tender floated on 15.06.2023, the maximum quantity assured by L1 bidder / vendor is 10-20 MTPD.

Delivery of such torrefied biomass pellets is to start within 5 days of issuance of purchase order/ letter of award. TSPL has issued Purchase Order on 31.07.2023 to M/s A.B Fuels for supply of 50 MT of torrefied biomass pellets.

6.2 On 28.07.2023, CAQM again wrote to TSPL with respect to non-compliance of its directions dated 17.09.2021 and that TSPL is liable for penal action for the same. TSPL replied to the same on 02.08.2023 with the request not to hold TSPL liable for penal action as it has been taking all necessary steps/ efforts towards compliance of the mandated directions and has been also consistently informing about the actions taken by TSPL from time to time towards compliance of CAQM's directions. It was also informed that TSPL has already placed Purchase Order for procurement of torrefied biomass pellets with L1 bidder/ supplier on 31.07.2023 under the Short-term tender for procurement and usage of biomass torrefied pellets.

6.3 It is submitted that non-availability of torrefied biomass pellets in the country has been recognised by:-

(a) CAQM's Minutes of Meeting dated 12.09.2022 which record that:-

"4. With a view to establish a robust and continuous supply chain of paddy straw/ bio-mass, it was brought to the notice of the State Government that the current number of palletisation / briquetting units and their respective manufacturing capacities fall much lower vis-à-vis the estimated requirement for Biomass pellets / briquettes etc. in TPPs and various Ex-situ industrial projects in Punjab..."

(b) Commission for Air Quality letter dated 10.05.2023, which states that ‘non-availability of torrefied pellets is one of the key reasons for poor compliance with CAQM’s directives’.

(c) MoP Notification dated 16.06.2023 modifying the Revised Biomass Policy, which inter-alia states that:-

“It has been observed that the availability of torrefied biomass pellets is much lower in the market. Therefore, those power plants which can use non-torrefied pellets should utilize the same only. Hence, TPPs having Bowl mill will issue tenders for non-torrefied biomass pellets only, while TPPs having either Ball & Race mill or Ball & Tube mill will issue tenders for Torrefied biomass pellets. This practise will continue till further notification on this issue.”

6.4 Pursuant to the bidding conducted by TSPL on 22.05.2023 and 23.06.2023 (i.e., after filing of the Petition), TSPL has received bids for supply of total 120 MTPD (under short-term and long-term tenders) of torrefied pellets only, against the total requirement approx. 1000 to 1326 MTPD of torrefied pellets for complying with the mandate of Revised Biomass Policy. Therefore, TSPL will also need to procure non-torrefied pellets (to the extent of shortfall in availability of torrefied pellets) for ensuring compliance with the MoP Policy.

6.5 Without prejudice to the above, there is a substantial economic benefit to PSPCL and in turn the consumers of Punjab if TSPL uses non-torrefied pellets instead of torrefied pellets, as evident from the table below:-

Particular		Torrefied Pellets	Non-Torrefied Pellets
Coal	Quantity- MT	92,91,262	92,91,262
	GCV- kCal/kg	3,200	3,200
	Rate (Rs/MT)	5,000	5,000
Biomass	Quantity- MT	3,87,135	3,87,135
	GCV- kCal/kg	4,000	3,175
	Rate (Rs/MT)	15,960	7,684
Weighted Average	Quantity- MT	96,78,397	96,78,397
	GCV- kCal/kg	3,232	3,199
	Rate (Rs/MT)	5,438	5,107
Per Unit Rate (Rs. /Unit)		4.0377	3.8318
Units Production(MUs)		12,904	12,904
Annual Energy Charge (Rs. Cr.)		5,210	4,945
Economic Benefit in a year of using Non-Torrefied Pellets vis-à-vis torrefied pellets (Rs. Cr)			265.77
Minimum inflation estimates for the next 5 years			4%
Present Value of Future Cash Flow (5 Year Cash Flow) (Rs. Cr)			1495.27

6.6 Evidently, cost of procurement of non-torrefied pellets is much cheaper than the cost of procurement of torrefied pellets. Use of non-torrefied pellets instead of torrefied pellets will result in cost saving of approx. Rs. 265.77 Crore annually. Biomass pellets have to be used for the entire duration of the PPA. Therefore, in the longer run, even after accounting for the capital expenditure of approx. Rs. 867 Crores to be incurred by TSPL for using non-torrefied pellets, PSPCL and the consumers of Punjab will stand to benefit if TSPL uses non-torrefied pellets. In view of the above it is submitted that TSPL ought to be permitted to use non-torrefied pellets also to the extent of shortfall in availability of torrefied

- pellets, for complying with the mandate of Revised Biomass Policy.
- 6.7 Failure to co-fire 5% biomass pellets may invite legal action against TSPL. However, since the biomass pellet is to be used as Fuel and in terms of the PPA it is PSPCL's obligation to provide Fuel to TSPL for generation of power from the Project. In the present case, PSPCL has failed to either provide the necessary quantity of biomass pellets to TSPL or its approval to TSPL to procure and use non-torrefied pellets to the extent of shortfall in availability of torrefied pellets. Hence, any penalty if levied on TSPL for failure to comply with the mandate of Revised Biomass Policy or CAQM Directions shall be borne by PSPCL in terms of Article 15.1 of the PPA and Section 73 of the Contract Act 1872.
- 6.8 It is pertinent to note that even PSPCL in its Reply dated 19.05.2023 has admitted that the MoP's Biomass Policy/ CAQM Direction dated 17.09.2021 amounts to 'Change in Law' for TSPL under Article 13 of the PPA. Therefore, once the said event is held to be change in law for TSPL the resultant expenditure to be incurred by TSPL (i.e., capital expenditure towards modification in boilers and mills and installation of biomass handling system and operational expenditure towards procurement of torrefied pellets and non-torrefied pellets) ought to be allowed by the Commission. Disallowance of this expenditure will be contrary to the principle of restitution and Article 13 of the PPA.
- 6.9 As regards the issue of threshold, it is submitted that:
- a) For the purpose of ascertaining the threshold limit under Article

13.2(b) of the PPA, PSPCL has incorrectly multiplied the LC value by 24 months to determine the threshold limit.

b) In terms of Article 11.4.1.1 of PPA, LC is to be given by PSPCL for an amount equal to 1.1 times the average of the Monthly Tariff payment in a contract year and hence the LC shall have a term of 12 months (i.e., a contract year). Therefore, use of the term '**in aggregate**' in Article 13.2(b) of PPA can only apply to change in law impact.

c) In terms of Article 13.2(b) of the PPA, TSPL will be entitled to compensation for a change in law event if the aggregate impact due to change in law in a contract year is more than 1% of the value of letter of credit provided by PSPCL. This position has been upheld by Hon'ble APTEL and the CERC. Hon'ble APTEL in Judgment dated 27.04.2021 in Appeal No. 172 of 2017 titled *Coastal Gujarat Power Ltd. v. CERC & Ors.*:

"24. The contract (PPA) expressly provides for restitution for CIL, by Article 13.2(b)..... such compensation to be payable where the impact of CIL is in excess of 1% Letter of Credit (LC) in aggregate for a contract year."

d) In the present case, PSPCL has provided Letter of Credit for Rs. 186.81 Crores. Accordingly, the threshold limit for admissibility of change in law compensation i.e., 1% of the value of Letter of Credit will be Rs. 1.86 Crore (i.e., 1% of 186.81 Crore).

6.10 Article 13.2(b) of the PPA which provides for compensation on account of change in law, does not fix any formula for computing

the compensation. The PPA provides for a specific provision (i.e., Clause 1.2.3 of Schedule 7) for computation of fuel charges payable by PSPCL to TSPL. Since TSPL is mandated to utilise biomass pellets as a co-fuel on account of compliance of the law, compensation for usage of biomass pellets will have to be worked out in accordance with Schedule 7 of the PPA. This will ensure harmonious interpretation of Article 13 and Clause 1.2.3 of Schedule 7 of the PPA, as compensation for biomass pellets will be on the same basis as coal and the reduction in coal usage by TSPL (on account of co-firing biomass pellets) will be duly adjusted.

6.11 The final cost for pass through will be calculated on the basis of actuals, accurate data on pricing of pellets and other considerable factors as in the case of coal. And, the procurement/ usage of biomass pellets will be subject to the same scrutiny/ sampling/ analysis as already being exercised in the case of coal procurement or any such methodology as may be laid down by the Commission.

6.12 In view thereof, it is submitted that TSPL ought to be compensated for the actual impact on its SHR, Auxiliary Consumption and O&M expenses on account of co-firing of biomass pellets along with coal.

7. PSPCL filed its reply on 18.08.2023 to the IA filed by the Petitioner, submitting as under:

7.1 The present IA is in contravention of the settled principles of law with respect to the grant of interim relief, namely, that the final relief

cannot be granted at the interim stage. In the present IA, TSPL has sought a Change in Law declaration and an in-principle approval for the additional expenditure to be incurred on account of the said Change in Law event, which are the same as the relief sought under the Main Petition.

- 7.2 The Petitioner, by way of an Interim Application, cannot claim a relief without addressing the objections raised by PSPCL on the admissibility of the petition as a whole. This is particularly when TSPL has not modified its petition nor has it withdrawn its prayers in regard to modification/retrofitting of the mills and is seeking a “without prejudice” consideration by the Commission
- 7.3 In so far as the prayer being sought for in-principle approval for use of torrefied pellets, PSPCL submits that there is no embargo preventing TSPL from procuring such torrefied pellets. In fact, on 31.07.2023, TSPL has issued a Purchase Order for the procurement of Agro-based torrefied pellets. The claim for the resultant expenditure/cost of procurement shall be subject to the consideration/ prudence check of the Commission in terms of Article 13 of the PPA and the threshold criteria of being in excess of an amount equivalent to 1% of the Letter of Credit in aggregate for a Contract Year, as mentioned under Article 13.2 (b) of the PPA.
- 7.4 TSPL is obligated to comply with the blending requirements in terms of the Revised Biomass Policy, 2021, and any delay in such compliance shall be attributable solely to TSPL. PSPCL has been prompt in filing its Reply to the present petition on 19.05.2023, and has been actively participating in the tendering process for torrefied

biomass pellets along with TSPL. Therefore, PSPCL shall not be liable for any consequences- penal or otherwise, on account of TSPL's delay in compliance with the said Policy.

8. In the hearing held on 23.08.2023, Ld. Counsel of PSPCL reiterated its objection to the consideration of IA filed by the Petitioner in isolation. However, both the parties submitted that they are ready to argue the main petition as well. After hearing the arguments the Order was reserved with direction that the parties may file their written submissions of arguments, if any. The Petitioner and PSPCL submitted their respective written submissions on 24.08.2023 and 08.09.2023, mainly in line of their earlier submissions.

9. Observations and the decision of the Commission

The Commission has examined the submissions and arguments thereon by the parties. The Petitioner is seeking declaration of a 'Change in Law' event and approval for consequent compensation for the additional costs required to be incurred for implementation of the biomass co-firing mandated by the directions issued under the CAQM Act and MoP Policy. The respondent PSPCL, though agreeing to the Petitioner's plea for declaration of said event as a 'Change in Law' is contending that in term of the PPA the compensation is allowable only upon actual incurring of the prudent costs and approval by the Commission subject to the fulfilment of threshold criteria laid down in Article 13.2(b) of the PPA. Further, PSPCL is also objecting to the Petitioner's prayer to seek approval for carrying out major modifications/ retrofitting in the boilers and install new Coal Mills with the contention that the same is not mandated/ necessitated by the impugned Change in Law event. The

Commission examines the prayers made by the Petitioner as under:

9.1 The prayer to hold and declare that MoP's Notification dated 08.10.2021, i.e., 'Revised Policy for Biomass Utilisation for Power Generation through Co-firing in Coal based Power Plants' and CAQM Direction dated 17.09.2021 constitutes a Change in Law event for TSPL in terms of Article 13 of the PPA dated 01.09.2008:

The issue of 'Change in Law' on account of said statutory directions issued to mandatorily co-fire Biomass pellets in coal based thermal power plants stand deliberated and decided in Petition No. 65 of 2022 filed by Nabha Power Ltd. (NPL) as under:

"8.1 Prayer to declare that the enactment of Commission for Air Quality Management (CAQM) Act, 2021 and the Direction no. 42 dated 17.09.2021 issued by CAQM thereunder constitutes 'Change in Law' in terms of Article 13 of the PPA, for which the Petitioner is entitled to reliefs there under:

... the Commission is of view that the enactment of the 'Commission for Air Quality Management (CAQM) Act' and the 'Direction no. 42 dated 17.09.2021' issued there under to initiate immediate steps to co-fire biomass based Pellets, Torrefied Pellets/Briquettes (with focus on paddy straw) with Coal (up to 5-10%) in the power plants situated within a radius of 300 km of Delhi, is a 'Change in Law' in terms of Article 13 of the PPA. Further, as there is no dispute regarding the Petitioners' project being situated within a radius of 300 km of Delhi, the said CAQM directions are also applicable on its project. The Commission observes that PSPCL is also agreeable to the same. Moreover, PSPCL has already obtained the Commission's approval for consideration of addition of cost on account of

use of Biomass Pellets along with Coal on account of said enactment/directions in case of its own thermal plants, in Petition No. 32 of 2022.

Thus, the Petitioners' prayer to treat this enactment (CAQM Act of 2021) and the directions issued thereunder as 'Change in Law' as per Article 13 of the PPA is allowed."

The Commission observes that, the MoP's Policy dated 08.10.2021 mandating use of biomass pellets to the extent of 5-7% is also in line with the CAQM Direction dated 17.09.2021. Further, with the Petitioner's plant being situated within a radius of 300 KM of Delhi and PSPCL also agreeable to the same, the Commission allows the Petitioners' prayer to consider the said direction/policy mandate to co-fire biomass with Coal in the power plants as a 'Change in Law' event in terms of Article 13 of its PPA dated 01.09.2008.

9.2 The prayer to grant in-principal approval for the capital expenditure of Rs. 867 Crore (i.e., 17 Crore for the biomass handling system + 850 Crore for modification of Boilers & replacement of Mills) and recurring operating expenditure of Rs. 397 Crore to be incurred by TSPL towards procurement of non-torrefied biomass pellets for usage of biomass as co-fuel in terms of the Energy Charges formula contained in Schedule 7 of the PPA dated 01.09.2008:

9.2.1 Biomass Handling System:

The issue of additional expenditure for infrastructural requirements of the biomass pellet handling system on account

of impugned 'Change in Law' event has been dealt in Petition No. 65 of 2022 filed by Nabha Power Ltd. (NPL) as under:

“8.3.2 a) Capital expenditure for additional infrastructure requirements:

.....The Commission agrees with the Petitioner that some additional infrastructure may be required for handling of the biomass fuel to be used for co-firing with coal, on account of said Change in Law event, for which it need to be compensated appropriately. However, the Commission is also in agreement with the PSPCL's contention that the entitlement of the compensation can be checked only after ascertaining the actually incurred amount, upon prudence check by the Commission, and subject to the fulfilment of threshold criteria of '1% of the LC in aggregate for a contract Year' laid down in Article 13.2(b) of the PPA.

Thus, the Petitioner shall be at liberty to approach the Commission after finalizing additional infrastructural requirements of the biomass pellet handling system, for implementation of directions on biomass co-firing in its coal based power plant, through a transparent and competitive bidding process, in consultation with PSPCL, who should also be associated and participate in the planning of required infrastructure, procurement and construction/installation process undertaken by the Petitioner.”

The Petitioner's prayer for additional expenditure for infrastructural requirements of the biomass pellet handling system on account of impugned 'Change in Law' event is also disposed of in terms of the same. The issue of Capex

for creating infrastructure to facilitate use of non-torrefied pellets is dealt with separately later in the order.

9.2.2 Modifications/retrofitting in the Boilers and installation of new Coal Mills:

The Petitioner' plea is that it shall be required to carry out major modifications/retrofitting in the Boilers and installation of new Coal Mills, entailing an additional capital expenditure of about Rs. 850 Crore alongwith deemed capacity charges (estimated by PSPCL to be about Rs. 430-640 Crore) for the consequent shutdown period of the plant for a period of 4 to 6 months, to enable the use of 'Non-Torrefied Pellets', citing a shortage/non-availability of the mandated 'Torrefied Pellets'. On the other hand PSPCL is contending that the Petitioner's proposal is not in line with the CAQM Directions/MoP's Policy.

The Commission refers to the relevant provisions of 'CAQM Directions', MoP's Policy and other documents available on record as under:

a) CAQM Direction No. 42 dated 17.09.2021, specifies as under:

"8. Whereas, the matter of utilisation of biomass pellets for co-firing in thermal power plants was discussed in the meetings held in the Commission on 09.12.2020, 13.07.2021 and also 5th Meeting of the Commission held on 19th August 2021 and 24th August,2021;

9. Where, NTPC, based on the trials and experimentation has confirmed that it is technically feasible and implementable to co-fire bio-mass pellets with coal in proportion upto 5-10% in Thermal Power Plants without any modification in the boilers;

.....

14. NOW THEREFORE, in view of the above position and the compelling need to control air pollution from burning of paddy straw and its effective utilization as a resource, the Commission constituted under the provision of “Commission for Air Quality Management in National Capital Region and Adjoining Areas, Act, 2021”, hereby directs the Coal based Thermal Power Plants situated upto a radius of 300 Km of Delhi:

- I. To initiate immediate steps to co-fire biomass based Pellets, Torrefied Pellets/Briquettes(with focus on paddy straw) with Coal (upto 5-10%) in the power plants through a continuous and uninterrupted supply chain and
- II. To take all necessary steps to ensure that co-firing of biomass pellets in Thermal Power Plants begins without any delay.”

(Emphasis supplied)

The Commission observes that the above CAQM Direction to co-fire biomass pellets with coal in proportion upto 5-10% has been issued based on the NTPC’s trials and experimentation confirming its technical feasibility and implementability without requiring any modification in the boilers.

b) MoP Policy dated 08.10.2021 for Biomass Utilisation for Power generation through Co-firing in Coal based Power Plants, reads as under:

“3 (i) All coal based thermal power plants of power generation utilities with **bowl mill**, shall on annual basis mandatorily use 5% blend of biomass pellets made, primarily, of agro residue along with coal w.e.f. one year of the date of issue of this guideline.. The obligation shall increase to 7% w.e.f. two years after the date of issue of this order and thereafter.

(ii) *All coal-based thermal power plants of power generation utilities with **ball & race mill**, shall on annual basis mandatorily use 5% blend of biomass pellets (torrefied only) made, primarily, of agro residue along with coal. This is to be complied within one year starting from this order. Two years from the date of issue of this order and thereafter the obligation will increase to 7%.*

(iii) *All coal-based thermal power plants of power generation utilities with **ball & tube mill**, shall on annual basis mandatorily use 5% blend of torrefied biomass pellets with volatile content below **22%**, primarily made of agro residue along with coal. This is to be complied within one year.*

.....

(v) *Any power plants seeking exemption/ relaxation from co-firing may be considered on case-to-case basis, based on recommendations of CEA....”*

(Emphasis supplied)

As is evident, the MoP Policy has specified the use of biomass pellets depending upon the type of Coal Mills installed in the thermal plants. There under, it has been explicitly specified that the plants with ball & tube mills, as is the case of TSPL, shall mandatorily use 5% blend of torrefied biomass pellets. The Petitioner’s plea that the use of ‘torrefied’ in ball & tube mill is not qualified by the word ‘**only**’ as used in case of ball & race mill, is misconceived. In case of ball and race mill, the expression ‘torrefied only’ is used after ‘biomass pellets’, to sub-classify the same, which was not required when the word “torrefied” is used as a prefix. The reliance placed by the Petitioner on the maxim

‘expressum facit cessare tacitum’ which means that when express inclusions are specified, anything not mentioned expressly is excluded, also do not supports its case. Further, MoP vide Policy modification dated 16.06.2023 has also directed that:

*“2.(c)..... TPPs having Bowl mill will issue tenders for non-torrefied biomass pellets only, while **TPPs having either Ball & Race mill or Ball & Tube mill will issue tenders for Torrefied biomass pellets.** This practise will continue till further notification on this issue.”*

(Emphasis supplied)

c) CEA’s Guidelines dated 04.02.2022 ‘for exemption/ relaxation from mandatory co-firing of Bio-mass by thermal plants’, while providing for a process for seeking exemption from the mandatory co-firing of biomass specify as under:

“V. Criteria of Assessment of Exemption claims

- A. General information
- B. Useful economic life of plant
- C. Technical feasibility study
- D. Project management time lines
- E. Technical constraints for enabling co-firing while ensuring safety of the plant
- F. Sourcing & supply chain constraints
- G. Possibilities of meeting the co-firing commitments as per alternate regulatory provisions
- H. List of documents furnished in support of stated constraints”

Above CEA Guidelines specify the “Sourcing & Supply Chain Constraints” also as one of the criteria for considering the exemption/ relaxation claims of the generating companies.

d) The Petitioner’s request dated 25.10.2021 addressed to MoP is reproduced below:

“TSPL has installed ball & tube mill type coal mills and it is not feasible to use biomass pellets along with the coal as per the recommendation with our O&M division due to safety respects.

Ball & tube mill shell is filled with balls and for mills operation, optimum coal level is maintained inside mill during operating period. So, there is always a good quantity of powdered coal present inside the mill shell as buffer.

Presence of other fuel such as biomass may lead to internal combustion in a ball/tube mill system and a continued flow of hot air and fuel past the ignition source results in a rapid downstream spread of fire that is both damaging and dangerous.

So it is submitted that we may kept at exempted from use of biomass in the fuel.”

(Emphasis supplied)

As is evident, the Petitioner had raised the issue of chance of fire in its mills and not the unavailability of the torrefied pellets while seeking exemption/relaxation in the matter. The Commission observes that, the technical capability and safety of ball & tube mill system installed in the Petitioner’s plant have already been taken into consideration in the Policy mandate by limiting the

blend of torrefied biomass pellets to 5% and volatile content to below 22% for these types of mills. Accordingly, the CEA, while drawing its attention to the relevant provisions of the MoP Policy for co-firing in ball & tube mills suggested that TSPL may consult the OEM and come out with the enablers. This cannot be construed as a direction to carry out major modifications/ retrofittings in Boilers and replacements of its Coal Mills entailing a cost of about Rs. 1280-1490 Crore onto the consumers along with a loss of generation due to shutdown of the units for a period of 4 to 6 months.

e) The Commission notes PSPCL's submission that, while projecting the potential savings, the Petitioner has not considered the cost implication of capacity charges and loss of generation on account of proposed shutdown of the units for carrying out major modifications/ retrofitting in Boilers and replacements of its Coal Mills which are not envisaged/ mandated either by the Direction No. 42 issued by CAQM nor in the MoP Policy documents dated 08.10.2021 and 16.06.2023. Further, the difference in cost of the torrefied and non-torrefied pellets is also likely to get reduced with the increased availability and benchmarking of the costs of torrefied pellets upon materialisation of various initiatives being envisaged by the Government and other market related interventions.

f) The Commission also notes that:

(i) Initially, it was submitted in the petition that TSPL is not getting any response to its tenders for procurement of torrefied pellets. Subsequently, in the IA filed in the petition and its rejoinder to PSPCL's reply, the Petitioner has submitted that now it has received bids for supply of 120 MTPD torrefied pellets under short-term and long-term tenders against its total requirement of about 1000 to 1300 MTPD.

(ii) On 12.09.2022, in the meeting held at the CAQM office regarding review of preparedness for "Prevention and Control of Paddy Straw burning", as per MoM placed at **Annexure P-24** to the petition, the State Governments have been advised to actively consider setting up biomass pelletising /briquetting units within/ in vicinity of TPPs.

(iii) On 03.10.2022, in the inter-ministerial meeting on the issues related to co-firing of biomass pellets in the TPPs, as per MoM placed at **Annexure P-29** to the petition, Hon'ble Minister of Power & NRE suggested that TPPs may set up their own pellet manufacturing units/ torrefication facilities, to convert non-torrefied pellets to torrefied pellets.

(iv) On 16.06.2023, the MoP has issued the modification to the Biomass Policy. Wherein a Committee has been constituted for price benchmarking of biomass pellets, the recommendations of which shall be effective from 01.01.2024. Further, while amending the year of

implementation of policy as FY 2024-25, the MoP has also reserved torrefied biomass pellets for thermal power plants with ball & race mills and ball & tube mills.

Thus, it is evident that the Government is continuously monitoring the situation and taking proactive steps to improve the supply chain of torrefied pellets for co-firing in the thermal plants. With materialisation of these measures/steps, the availability of torrefied biomass pellets is likely to improve in the coming period.

As discussed above, the CAQM Direction No. 42 has been issued after ascertaining that the existing equipment can accommodate 5-10% biomass and torrefied pellets without requiring any modification in the boilers. Further, the MoP Policy has specified the use of biomass pellets depending upon the type of Coal Mills installed in the thermal plants where under it has been specifically provided that the plants with ball & tube mills, as is the case of TSPL, shall mandatorily use 5% blend of torrefied biomass pellets. Accordingly, TSPL has also been advised by CEA to consult their OEM for appropriate required enablers.

Thus, the Petitioner's prayer to seek in-principle approval for carrying out major modifications/retrofitting in the Boilers and replacing its Coal Mills is contrary to the terms of the CAQM Direction read with MoP Policy documents and hence cannot be attributed to the impugned 'Change in Law' event in terms of Article 13 of the PPA.

Also, burdening the consumers in the State with an estimated expenditure of about Rs. 1280-1490 Crore and a generation loss for a period of about 4 to 6 months due to the shutdown of its units to enable use of unapproved non-torrefied pellets in place of the mandated torrefied pellets would in fact be contrary to and in violation of the MoP's mandate to use torrefied pellets. Moreover, with the continuously increasing demand in the State, the shutdown of any unit for such a long duration is unacceptable and not warranted for reasons not technically justified.

This prayer is thus denied in terms of Article 13 of the PPA, being contrary to and in violation of the CAQM Direction and MoP (GoI) Policy.

9.2.3 Cost of procurement of biomass pellets:

As discussed in the previous para, the MoP Policy documents specifies that all coal-based thermal power plants with ball & tube mills, as is the case of the Petitioner, shall mandatorily use and issue tenders for Torrefied biomass pellets. Hence, the Commission is of the view that the Petitioner's prayer to allow in-principal approval for procurement of non-torrefied biomass pellets in place of the mandated torrefied pellets for usage as co-fuel in its plant is not in line with the MoP Policy directive. However, vide an IA filed in the petition, the Petitioner has also prayed to grant in-principal approval for procurement/ usage of torrefied pellets and pass through of the resultant cost/expenditure of the same to PSPCL in terms of the PPA.

The Commission has already dealt the issue of cost to be incurred for procurement of biomass pellets for co-firing with coal on account of impugned 'Change in Law' event in Petition No. 65 of 2022 filed by Nabha Power Ltd. (NPL) as under:

“8.3.1 a) Cost of biomass pellets:

The Commission refers to the Order dated 27.10.2022 in Petition No. 32 of 2022 filed by PSPCL, wherein, the Commission has allowed the addition of cost of biomass pellets along with Coal on account of usage of biomass pellets co-fired with coal in PSPCL's own thermal power plants, with the following observations:

“7. iii) CERC vide order dated 18.02.2020 in suo-motu petition no. 12/SM/2019 has already defined the methodology for estimation of electricity generated from such co-fired biomass-based Pellets, Torrefied Pellets/Briquettes with Coal (up to 5-10%). Addl. Chief Secretary, Department of NRES, Government of Punjab has also recommended that the Biomass co-firing be allowed based on CERC methodology. The commission also notes the submission of PEDDA that the order passed by CERC is complete and can be well relied upon in the instant case since it is already being followed by NTPC etc.

.....

v) As the increase in generation cost shall be borne by the consumers of Punjab State against which burning of paddy straw is required to be reduced in Punjab, accordingly, the Commission directs PSPCL to procure the biomass based Pellets, Torrefied Pellets/Briquettes subject to the conditions that the pellets are manufactured using biomass (paddy straw/stubble) procured

preferably from within Punjab as far as possible and as long as price is competitive so as to have the maximum positive environmental impact. Further, to reduce the cost of transportation of pellets, pellets manufacturer situated in Punjab may be preferred to avoid double transportation cost.

vi) Keeping the above in view, the Commission adopts CERC Order issued on dated 18.02.2020 in Suo Moto Petition No. 12/SM/2019 in toto and allows the addition of cost of biomass pellets along with Coal to add to the total Fuel cost of PSPCL Thermal Generating Units (GGSSTP Ropar & GHTP, Lehra Mohabbat) for ARR, FCA and other purposes on account of usage of biomass pellets co-fired with coal in thermal power plants in line with the above referred Order. However, MOD shall be calculated without considering the impact of Biomass Pellets.

The final cost for pass through will be calculated on the basis of actual accurate data on pricing of pellets and other factors

Further, PSPCL shall submit the requisite data for quantifying the energy produced from biomass in biomass co-firing for verification/inspection by PEDDA, being the State Agency for monitoring of RPO compliance by the obligated entities in Punjab, for qualification of same as PSPCL's RPO compliance."

Accordingly, the Commission is of the view that the similar findings can also be made applicable to the Petitioner for co-firing of Biomass fuel with coal in its thermal plant. However, in order to ensure the availability of the biomass-pellets at a reasonable cost and to avoid unnecessary litigation between the parties, it would be proper if the Petitioner procure the same through a transparent and

competitive bidding process, in consultation with the sole procurer of power i.e. PSPCL, who may also participate in the procurement process undertaken by the petitioner. Both parties shall extend full cooperation in this regard to each other.

Further, the procurement/usage (including the sourcing) of biomass shall be subject to the same scrutiny/sampling/analysis as already being exercised in the case of coal procurement or any such methodology as may be laid down by the Commission.

Also, the Petitioner shall furnish the requisite details, as sought for by PSPCL/PEDA for assessment of generation of RE energy for RPO compliance, i.e. the energy generated using biomass, its landed cost (including the basic cost, transportation, insurance etc.), GCV, procured quantity, consumption and stock position, etc.”

The Commission is of the view that the above findings can also be made applicable to the Petitioner for mandated co-firing of Torrefied Pellets with coal in its thermal plant.

9.3 The prayers to allow/approve increase in Net Quoted Heat Rate, Auxiliary Power Consumption and other recurring annual operating expenditure to be incurred by TSPL on account of the utilization of biomass as co-fuel with coal:

The Commission has dealt with the said issues of change in the Net Quoted Heat Rate, Auxiliary Power Consumption and other operating expenditure on account of impugned ‘Change in Law’ event in Petition No. 65 of 2022 filed by Nabha Power Ltd. (NPL) as under:

“8.3.1 b) Issue of compensation on account of change in its ‘Net Quoted Heat Rate’ and ‘Auxiliary Power Consumption’ on implementation of CAQM Directions to co-fire Bio-mass with coal:

....., the Commission is of view that, in the absence of adequate relevant data the actual impact on the ‘SHR’ and ‘Auxiliary Power Consumption’ on account of co-firing of bio-mass along with coal cannot be quantified at this stage, for the purpose of consideration of compensation on account of same to the Petitioner. The Commission also feels that addition of Biomass pellets possibly having higher GCV may ultimately result in better performance parameters. Moreover, presently no relaxation in performance parameters has been determined/ allowed by CEA/CERC for use of Biomass in co-firing with coal for generation of power, including for the NTPC plant cited by the Petitioner.

However, noting PSPCL’s contention that the Petitioner is required to quantify the impact on actual basis and also the Petitioners’ willingness to carry out a study of its own plant, the Commission finds it appropriate to grant liberty to the Petitioner to come up with a study of its own plant, conducted jointly with PSPCL, to quantify the impact of Bio-mass co-firing on the ‘SHR’ and ‘Auxiliary Power Consumption’ on actual basis, upon successful commencement of biomass co-firing in its thermal station.”

“8.3.2 b) Additional Operation & maintenance (O&M) costs:

On the issue of the Petitioners’ claim for compensation citing increase in the O&M costs on account of handling of biomass pellets, the Commission is in agreement with PSPCL that the addition of biomass in the fuel shall also entail corresponding reduction in coal requirement and consequently the O&M costs involved in handling of coal.

The Commission is also of the view that, addition of Biomass pellets possibly having higher GCV may ultimately result in lower O&M costs.

Since, at present there is inadequate data to assess the true picture, the Petitioner is required to come up with a study of its own plant, conducted jointly with PSPCL, to quantify the differential impact of Bio-mass co-firing on its O&M costs on actual basis after accounting for reduction in O&M costs on account of reduced coal intake, upon successful commencement of biomass co-firing in its thermal station.”

The Commission is of the view that the above findings can also be made applicable to the Petitioner for mandated co-firing of Torrefied Pellets with coal in its thermal plant.

9.4 Prayer to allow/ grant interest on working capital requirements to be claimed on actuals/ as per CERC benchmark (whichever is higher) for:

- (i) Working capital requirements for stocking of two months' worth biomass pellets at the Project site.
- (ii) Additional receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor.
- (iii) Additional Operation and maintenance expenses for two months.

As observed in the above paras, in the absence of adequate relevant data, the actual impact of various cost components on the Petitioner cannot be quantified at this stage. Accordingly, the Petitioner shall be at liberty to approach the Commission with its proposal for the additional working capital

requirements on actual basis upon successful commencement of biomass co-firing in its thermal station.

9.5 The Prayer to allow payment of Deemed Capacity Charges for the shutdown period required for modification/ installation at the Project (on actuals):

The Commission has not allowed the Petitioner's prayer to carry out major modifications/retrofitting in the Boilers and installation of new Coal Mills, the same being being contrary to and in violation of the CAQM Direction and MoP (GoI) Policy.

Therefore, the plea of the Petitioner to allow payment of Deemed Capacity Charges for the shutdown period necessitated carrying out the said modification/ installation is also not maintainable. However, in case any shutdown is required for any interconnection or other minor works, the same can be clubbed with the routine general maintenance schedule of the units in consultation with PSPCL.

9.6 The Prayer to devise appropriate norms for computing the adjustment in tariff to offset the additional investment/ increase in costs due to the biomass Co-firing in Coal based Power Plants and to grant liberty to claim compensation and tariff adjustment based on actual cost incurred by the Petitioner:

As also discussed in previous paras, adequate relevant data is not yet available regarding the actual impact on the Capex requirement and performance parameters such as 'SHR' and 'Auxiliary Power Consumption' on account of co-firing of bio-mass along with coal. Neither, such norms/relaxation in performance parameters has

been determined/ allowed so far by the CEA/CERC for use of Biomass in co-firing with coal for generation of power.

The Commission shall be considering the same as and when determined by the CEA/CERC and/or on submission of the adequate relevant data available on actual basis upon successful commencement of biomass co-firing in the Petitioner's thermal units. Accordingly, as also held by the Commission in the above paras, the Petitioner shall be at liberty to approach the Commission for consideration of its claim for the compensation and tariff adjustment in terms of the PPA, based on the actual costs/expenditure arrived on actual basis upon successful commencement of biomass co-firing in its thermal station, in line with the directions issued in the preceding paras.

Further, the Petitioner has submitted that vide various communications it keeps on informing PSPCL about the developments in the matter and requesting for PSPCL's participation in its tendering process. Participation of the sole procurer of power i.e. PSPCL is also evident from the copy of Minutes of Meetings regarding the opening of bids for procurement of Torrefied Pellets for the project.

Accordingly, as also directed in the previous paras, in order to ensure transparency, competitiveness and also to avoid unnecessary litigation, it would be incumbent on the parties to continue with the joint proceedings for all activities involved for the successful implementations of the CAQM/ Gol mandate.

9.7 Threshold amount for entitlement of Compensation:

The Commission notes that there seems to be some confusion between the parties regarding the determination of the threshold limit to ascertain the entitlement for payment of compensation in terms of Article 13.2(b) of the PPA. It has been submitted by PSPCL that at present the threshold limit works out to be Rs. 44.83 Crore (i.e. 1% of 186.81x24) as PSPCL has provided a Letter of Credit (LC) for an amount of Rs.186.81 Crore to TSPL on a fortnightly (15 days) rolling basis. Whereas, the Petitioner's plea is that the use of term 'in aggregate for a Contract Year' applies to the change in law impact since the LC is based on the average monthly tariff payment in a contract year with a term of 12 months i.e a contract year. Accordingly the threshold limit for admissibility of change in law compensation should be Rs. 1.86 Crore i.e., 1% of value of LC maintained by PSPCL.

The Commission refers to the Article "13.2 of the PPA, which reads as under:

"13.2 Application and Principles for computing impact of Change in Law:

While determining the consequence of Change in Law under this Article 13, the Parties shall have due regard to the principle that the purpose of compensating the Party affected by such Change in Law, is to restore through Monthly Tariff payments, to the extent contemplated in this Article 13, the affected Party to the same economic position as if such Change in Law has not occurred.

.....

b) Operation Period

As a result of Change in Law, the compensation for any increase/ decrease in revenues or cost to the Seller shall be determined and effective from such date, as decided by the Appropriate Commission whose decision shall be final and binding on both the Parties, subject to rights of appeal provided under applicable Law.

Provided that the above mentioned compensation shall be payable only if and for increase/ decrease in revenues or cost to the Seller is in excess of an amount equivalent to 1% of the Letter of Credit in aggregate for a Contract Year..”

The Commission observes that the said provision is quite unambiguous and self-explanatory. The interpretation sought to be made by the Petitioner that the term ‘in aggregate for a contract year’ applies to the ‘increase/decrease in revenue or cost’ and not ‘LC’ is misplaced. It is a settled principle of interpretation that the words of a contract must be taken in their ordinary and natural sense unless such literal interpretation results in an absurdity. Hon’ble APTEL Judgment dated 27.04.2021, in Appeal No. 172 of 2017 titled Coastal Gujarat Power Ltd. v. CERC & Ors., as cited by the Petitioner also reiterates the provision of the PPA that, *“such compensation is to be payable where the impact of CIL is in excess of 1% Letter of Credit (LC) in aggregate for a contract year”*.

Thus, the Commission is in agreement with PSPCL that in order to determine the threshold amount for entitlement of the compensation payable on account of the ‘Change in Law’ in

terms of the PPA, the LC maintained by it on fortnightly basis is required to be aggregated for the full contract year.

The Petition and the IA are disposed of in light of the above analysis/observations and directions of the Commission.

Sd/-

(Paramjeet Singh)
Member

Sd/-

(Viswajeet Khanna)
Chairperson

Chandigarh

Dated: **21.09.2023**

