



राष्ट्रीय राजधानी क्षेत्र और निकटवर्ती क्षेत्र
वायु गुणवत्ता प्रबंधन आयोग
Commission for Air Quality Management in
National Capital Region and
Adjoining Areas



F.No.-120015/25/TPP/CAQM/(TSPL) - 1592DT

Dated: 01.04.2026

To,

1. Talwandi Sabo Power Limited (Group Corporate Office)
Through Mr. Vibhav Agarwal
The Chief Executive Officer
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2. Talwandi Sabo Power Limited,
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DIRECTION FOR IMPOSITION OF ENVIRONMENTAL COMPENSATION UNDER RULE – 3 OF THE ENVIRONMENT (UTILISATION OF CROP RESIDUE BY THERMAL POWER PLANTS) RULES, 2023, READ WITH SECTION 12 OF THE COMMISSION FOR AIR QUALITY MANAGEMENT IN NATIONAL CAPITAL REGION AND THE ADJOINING AREAS ACT, 2021, FOR NON-COMPLIANCE OR CONTRAVENTION OF THE PROVISIONS OF THE AFORESAID RULES WITH RESPECT TO MANDATORY USE OF A MINIMUM FIVE PERCENT BLEND OF PELLETS OR BRIQUETTES MADE OF CROP RESIDUE ALONG WITH COAL

WHEREAS, Ministry of Environment, Forest and Climate Change (MoEF&CC) has notified Environment (Utilisation of Crop residue by Thermal Power Plants) Rules, 2023 read with Corrigendum GSR 522(E), dated 18.07.2023 (hereinafter referred to as the “Rules, 2023”) which are applicable to National Capital Region and the Adjoining Areas as defined respectively in clauses (f) and (a) of sub-section (1) of section 2 of the

Commission for Air Quality Management in National Capital Region and Adjoining Areas Act, 2021(hereinafter referred to as the “CAQM Act”);

WHEREAS, Rule 2 of the Rules, 2023 mandates coal based thermal power plants of power generation to utilise a minimum five per cent (min. 5%) blend of pellets or briquettes made of crop residue along with coal;

WHEREAS, the Rule 3 of the Rules, 2023 also empowers the Commission for Air Quality Management in National Capital Region and Adjoining Areas (hereinafter referred to as the “Commission”) or its authorized officer to impose and collect the Environmental Compensation (hereinafter referred to as the “EC”) from non-compliant Thermal Power Plants on annual basis for non-utilisation of crop residue as per Rule 2, of the said Rules;

WHEREAS, Ministry of Environment, Forest and Climate Change, Government of India, in exercise of the power conferred under Section 3 of the CAQM Act has constituted the Commission for better co-ordination, research, identification and resolution of problems surrounding the air quality index and for matters connected therewith or incidental thereto;

WHEREAS, Section 12(2)(xi) of the aforesaid CAQM Act empowers the Commission to issue directions in writing to any person, officer or any authority, which includes power to direct closure, prohibition or regulation of any industry, operation or process and includes stoppage or regulation of supply of electricity or water or any other service;

WHEREAS, the Commission is empowered to take all such measures and issue directions as it deems necessary or expedient for the purpose of protecting and improving the quality of the air in the National Capital Region and Adjoining Areas;

WHEREAS, the Commission had rigorously taken up-co-firing of bio-mass/pellets in coal based Thermal Power Plants as viable and major alternate to control stubble burning to mitigate air pollution. Therefore, it was felt by the Commission to promote and create an eco-system for *ex-situ* crop residue management through biomass utilization in Thermal Power Plants (TPPs);

WHEREAS, the Commission after extensive deliberations and taking inputs of all concerned stakeholders had issued Advisory No(s) 5-7 dated 28.07.2021 to the State



Governments of Haryana, Punjab and Uttar Pradesh for initiating several steps so that paddy straw based biomass pellets can be successfully used in TPPs for co-firing;

WHEREAS, the Commission subsequently reviewed the issue of co-firing of biomass pellets with the concerned stakeholders and keeping in view the compelling need to control air pollution from burning of paddy straw and its effective utilization as a resource, the Commission issued Statutory Direction No 42, dated 17.09.2021 to Thermal Power Plants situated upto a radius of 300 km of Delhi mandating co-firing of biomass based pellets up to 5-10 % substituting coal with immediate effect through a continuous and uninterrupted supply chain;

WHEREAS, NTPC, based on the trials and experimentation has confirmed before issuance of Direction No. 42 that it is technically feasible and implementable to co-fire bio-mass pellets/ torrefied pellets with coal in proportion up to 5-10% in the TPPs without any modifications in the boilers and there are no technical constraints in utilizing paddy straw pellets for co-firing and such co-firing is already being done in super-critical boilers in three NTPC plants;

WHEREAS, the Commission in a series of meetings with the concerned State Governments and stakeholders had closely monitored and reviewed the status of implementation and compliance of its Statutory Direction No. 42 dated 17.09.2021 and also issued necessary instructions from time to time for ensuring effective and strict compliance of the Commission's Directions;

WHEREAS, despite Statutory Direction, subsequent continuous meetings / reviews, the progress of M/s Talwandi Sabo Power Limited (TSPL) – Vedanta, Mansa, Punjab in ensuring the required level of co-firing has remained grossly inadequate and non-compliant;

WHEREAS, noting a lack of implementation despite Statutory Direction(s), the Rules, 2023 and regular reviews, the Commission previously vide its communication bearing No. F.No.-120015/25/TPP/CAQM/(TSPL)/760-61, dated 15.02.2024 issued notice to TSPL-Vedanta, Mansa, Punjab with an intent to take action under Section – 14 of the Commission for Air Quality Management in NCR and Adjoining Areas Act, 2021 for non-compliance or contravention of the directions issued under section 12(2)(xi) with respect to co-firing paddy stubble as part of ex-situ paddy straw management *vis-a-vis* Direction No. 42 dated 17.09.2021;

WHEREAS, TSPL-Vedanta, Mansa, Punjab in its reply dated 04.03.2024 submitted various reasons for the non-compliance. However, upon examination of the reply it was found that no substantial reason(s) was explained by the TSPL, which may establish that non-compliance was due to the reasons that were beyond their control;

WHEREAS, the compliance status for co-firing of requisite / targeted blend of pellets or briquettes made of crop residue in TPPs were found not satisfactory. Accordingly, high level joint inspection visits were conducted in such TPPs which included the TPP of TSPL-Vedanta, Mansa, Punjab. Based on the said inspection, amongst other instructions, TSPL-Vedanta was asked to immediately place multiple diversified orders to multiple vendors to ensure compliance, including setting up own pellets manufacturing plant;

WHEREAS, as per the information provided by the Ministry of Power, Government of India, TSPL-Vedanta, Mansa, Punjab has co-fired only 26,061 Metric Tonnes in 2024-25 against the mandatory co-firing target of at least 5%, which clearly establishes the fact that entity has done only about 0.36% of biomass co-firing against a total of 73,23,356 Metric Tonnes of coal consumed in the year 2024-25, which was in gross violation of the Rules, 2023 on account of the fact that as per Rule 2 *“all coal based thermal power plants of power generation utilities shall mandatorily use minimum five per cent blend of pellets or briquettes made of crop residue along with coal”* and Rule 3 mandates co-firing of more than 3% for FY 2024-25 i.e. at least 2,19,701 Metric Tonnes so as to avoid imposition of stipulated environmental compensation. Therefore, due to consistent non-compliance, M/s Talwandi Sabo Power Limited (TSPL-Vedanta), Mansa, Punjab has failed to comply with the directives/ mandates of the Commission and failed to comply with the statutory mandates under the Rules, 2023;

WHEREAS, the Commission on 21.03.2025 constituted a Committee in terms of Rule 5 of the Rules, 2023 comprising of Members from the Commission, Central Electricity Authority (CEA) and Sustainable Agrarian Mission on use of Agri-Residue in Thermal Power Plants (SAMARTH) and Central Pollution Control Board (CPCB), to consider relaxation to thermal power plants on the Environmental Compensation imposed on them for non-utilization of crop residue on case to case basis;

WHEREAS, the Committee held detailed deliberations on 13.06.2025, 31.07.2025, 26.08.2025, 22.09.2025, 19.01.2026 and 20.03.2026 wherein performance data,



compliance status, written submissions and grounds cited for relaxation were examined in depth. During its meetings, the Committee also undertook a comprehensive review of the overall performance of all eleven (11) identified TPPs for FY 2024–25 vis-à-vis the statutory co-firing targets prescribed under the Rules, 2023;

WHEREAS, the Committee also evaluated the EC, if any, liable to be imposed for non-compliance during FY 2024–25 against defaulting TPPs, in accordance with the Rules, 2023;

WHEREAS, the Committee decided that opportunity of personal hearing may be provided to the non-compliant Thermal Power Plants and accordingly, the Committee heard TSPL on 26.08.2025;

WHEREAS, upon consideration of the written and oral submissions and relevant material placed on record during the hearing, the Committee observed that the explanations and grounds advanced by the TSPL were insufficient to demonstrate that the circumstances leading to non-compliance were beyond their reasonable control within the meaning of Rule 5 of the Rules, 2023. The material on record did not establish the existence of any force majeure–like situation or systemic impediment attributable to such factors that could justify relaxation of the statutory mandate;

WHEREAS, as per Rule 3 of the Environment (Utilisation of Crop residue by Thermal Power Plants) Rules, 2023, Environmental Compensation of **Rs. 33,02,56,800/- (Thirty three crore two lakh fifty six thousand eight hundred only)** is required to be imposed on TSPL-Vedanta, Mansa, Punjab for violation of the Rules, 2023 without prejudice to any action under the provisions of the CAQM Act as given below:

Determination of applicable Environmental Compensation (EC) for the year 2024-25						
Details of TPP	Coal Consumed (in Metric Tonnes)	Biomass co-firing required to meet 3% (in Metric Tonnes)	Actual Biomass co-fired (in Metric Tonnes)	Biomass Co-fired (in %)	Electricity Generated in (Million Units)	Environmental Compensation in Rs. (@ Rs. 0.03 per unit of electricity generated)
TSPL, Mansa (1980 MW)	73,23,356	2,19,701	26,061	About 0.36 %	11,008.56	33,02,56,800

WHEREAS, the Committee had earlier afforded TSPL-Vedanta, Mansa, Punjab, an opportunity of personal hearing, during which its submissions were duly considered; and thereafter, with a view to further ensuring that TSPL was provided reasonable and adequate opportunity to present its case and respond to the proposed action, a Show Cause Notice dated 23.12.2025 was issued proposing the imposition of Environmental Compensation of **Rs. 33,02,56,800/- (Thirty three crore two lakh fifty six thousand eight hundred only)**, thereby granting a further period of fifteen (15) days from the date of issuance of the said notice to submit its explanation;

WHEREAS, upon consideration of the written and oral submissions and the material placed on record by TSPL, including its reply dated 12.01.2026 to the Show Cause Notice dated 23.12.2025, the Committee observed that the following key issues, among others, arose for determination:

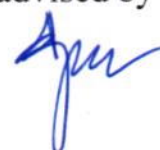
- I. In respect of TSPL, Mansa, the representatives of TSPL submitted that the plant is equipped with a ball and tube mill configuration, for which torrefied biomass pellets are technically required for sustained co-firing operations. It was stated that regular supply of torrefied biomass pellets commenced from March 2024 and that TSPL has been consistently co-firing torrefied biomass pellets since 2024.
- II. TSPL has also submitted that it has adopted a diversified contracting framework comprising short-term (3-6 months), medium-term (12 months) and long-term (up to 60 months) supply arrangements. It was informed that seven long-term contracts (aggregating 61 months) were awarded to seven entities for supply of torrefied pellets, with projected cumulative supply of up to 7,30,000 MT by 2029. However, in certain cases, supply under the awarded contracts has not yet commenced. In addition, six short to medium term contracts (3-12 months) have been awarded to other suppliers.
- III. In response to queries regarding discontinuation of co-firing after conducting the pilot project in 2022, TSPL clarified that the said pilot involved 50 MT of non-torrefied pellets and was discontinued due to technical incompatibility with the ball and tube mill system.
- IV. TSPL further submitted that:



- Approximately 75 vendors were engaged through the SAMARTH portal and multiple tenders were issued;
 - The plant operates under a 100% PPA with PSPCL, Government of Punjab;
 - Fuel-related decisions required concurrence of PSPCL, which had earlier raised objections to co-firing of non-torrefied pellets; and
 - Constraints relating to tariff adjustment and cost pass-through under the Electricity Act contributed to delays in regular co-firing.
- V. TSPL also submitted that owing to logistical and technical constraints affecting torrefied pellet availability, it undertook stubble management initiatives under its CSR programme, including awareness campaigns, distribution of bio-decomposer, recognition of progressive farmers and vendor partnerships targeting approximately 8 lakh MT biomass. It was claimed that such efforts contributed to reduction in stubble burning incidents in Mansa district.
- VI. Finally, TSPL highlighted its preparedness for FY 2025-26 and submitted that against a target of 3.86 lakh MT, it had already co-fired approximately 1.15 lakh MT of torrefied pellets by mid-August 2025. On this basis, TSPL requested that a one-time relaxation from imposition of EC for FY 2024–25 be granted in view of its subsequent improvement and proactive efforts.

WHEREAS, the Committee carefully examined the submissions and relevant records / data and observed that the technical configuration of the plant (ball and tube mill) was known since issuance of Direction No. 42 in the year 2021. Therefore, the requirement of torrefied pellets cannot be treated as an unforeseen circumstance arising during FY 2024–25. It was further noted that:

- i. **Delayed Augmentation of Supply Arrangements:** Although TSPL has now entered into multiple long-term and short-term contracts, substantial procurement and diversification efforts were initiated only in 2024, particularly after clarification regarding cost pass-through was issued by the MoP. The Committee observed that proactive augmentation measures could and ought to have been undertaken earlier.
- ii. **Availability of Torrefied Pellets:** Regarding the overall estimated requirement and availability of torrefied biomass pellets during FY 2024-25, the Committee noted that since 2021 TSPL had been repeatedly advised by the



Commission and concerned Ministries to facilitate capacity augmentation and explore establishment of its own torrefied pellet manufacturing arrangements. TSPL did not demonstrate timely or sufficient action in this regard.

- iii. **Tariff Adjustment / PPA Constraints:** The Committee observed that issues relating to tariff adjustment, PPA terms or regulatory approvals do not absolve TSPL from complying with statutory mandates under the Rules, 2023. It was further noted that despite raising tariff-related concerns, TSPL did not establish that it had pursued expeditious resolution before the appropriate regulatory forum in a time-bound manner.
- iv. **CSR Activities:** While appreciating the CSR initiatives undertaken by TSPL in relation to stubble management, the Committee observed that such measures cannot substitute compliance with the mandated co-firing requirements. Statutory compliance must be assessed strictly on the basis of actual biomass co-fired vis-à-vis prescribed targets.
- v. **Prior Correspondence and Advisory:** The Commission had on multiple occasions during 2022-2024, flagged TSPL's lag in performance and sought specific action plans for augmentation of co-firing. A Notice was ultimately issued on 15.02.2024 due to continued non-compliance. The Committee observed that despite claimed unsuccessful co-firing pilot efforts undertaken in the year 2022 for non-torrefied pellets and subsequent successful co-firing in the year 2023, TSPL failed to initiate procurement and co-firing of torrefied pellets in a timely manner to comply with mandate as per the Direction of the Commission and with the Rules notified in the year 2023.
- vi. **Subsequent Improvement in FY 2025-26:** The Committee acknowledged that TSPL has demonstrated improved performance during FY 2025-26. However, subsequent compliance cannot retrospectively cure non-compliance for FY 2024-25, particularly where the shortfall relates to a statutory annual mandate.

WHEREAS, the Committee duly considered the response of the TSPL and a report was subsequently submitted to the Commission, wherein, upon comprehensive consideration of the written / oral submissions and material placed on record, the Committee concluded as follows:



- i. That TSPL has failed to achieve the prescribed biomass co-firing target for FY 2024-25 and has not established the existence of any circumstance beyond its reasonable control within the meaning of Rule 5 of the Environment (Utilisation of Crop Residue by Thermal Power Plants) Rules, 2023.
- ii. The technical configuration of the plant (ball and tube mill) and the corresponding requirement of torrefied biomass pellets were known to TSPL since issuance of Direction No. 42 in the year 2021. The claimed necessity of torrefied pellets, therefore, cannot be treated as an unforeseen development arising during FY 2024-25. The material on record indicates that substantial augmentation of procurement and contracting arrangements was undertaken only during 2024, despite repeated instructions/ communications from the Commission during 2022-2024.
- iii. The constraints cited by TSPL including limited availability of torrefied pellets, logistical challenges, tariff adjustment issues and PPA-related approvals pertain to commercial and operational considerations falling within the management domain of TSPL. Such factors may indicate commercial difficulty but do not constitute legal impossibility, force majeure or any statutory prohibition preventing compliance. No material has been placed on record to demonstrate that compliance was rendered objectively impossible.
- iv. While the Committee acknowledges the CSR initiatives undertaken by TSPL towards stubble management and notes the improved co-firing performance during FY 2025-26. However, subsequent compliance or CSR measures cannot retrospectively offset the statutory shortfall for FY 2024-25. Compliance with the mandated co-firing percentage is to be assessed strictly on the basis of actual biomass utilized vis-à-vis the prescribed annual target.
- v. The Committee also noted that, despite advising repeatedly to TSPL to establish in-house or proximate pellet manufacturing facilities, TSPL failed to comply with the same.

WHEREAS, the Committee observed that a series of sustained regulatory and facilitative measures were undertaken over a period of time with a view to securing



compliance by TSPL; however, notwithstanding such continued efforts, TSPL did not achieve compliance in accordance with the prescribed statutory requirements;

WHEREAS, in view of the foregoing, the Committee was not satisfied that TSPL has made out a case for relaxation under Rule 5. Accordingly, EC is liable to be imposed for the shortfall in biomass co-firing during FY 2024-25. The EC computed strictly in accordance with the prescribed regulatory methodology is compensatory and deterrent in nature, intended to secure adherence to the statutory mandate;

WHEREAS, the Committee, upon a comprehensive review of the representations, replies and oral submissions placed on record and having regard to the facts and circumstances emerging in the present matter, further observed and reaffirmed that:

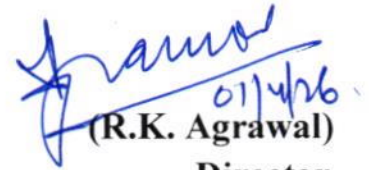
- i. The explanations and justifications advanced by the TPP are insufficient to establish that the circumstances cited were beyond their reasonable control within the meaning of Rule 5 of the Rules, 2023. The material on record does not demonstrate force majeure, statutory prohibition or legal impediment preventing compliance.
- ii. The constraints cited predominantly relate to operational and managerial domain of the TPP and were capable of mitigation through timely and structured managerial response and diversified procurement planning, including establishment of in-house or proximate pellet manufacturing arrangements.
- iii. Upon detailed examination of the compliance measures and actions undertaken by the TPP, there appears to be a clear lack of intent to adhere to the statutory mandate. Further, no effective efforts were evident towards achieving the prescribed co-firing targets. In view of the long-term and sustained compliance requirements aimed at preventing stubble burning incidents, the Committee was of the considered opinion that the imposition of suitable EC on the defaulting TPP is warranted. Such imposition would not only address the present non-compliance but would also serve as a deterrent.

WHEREAS, the Commission, upon consideration of the report and recommendations of the Committee, reply of TSPL and other material available on record, is satisfied that adequate and sufficient opportunity of being heard was afforded to TSPL in line with



the principles of natural justice and that no ground has been made out warranting any relaxation from the statutory requirements under the Environment (Utilisation of Crop Residue by Thermal Power Plants) Rules, 2023;

NOW, THEREFORE, in view of the foregoing, the Commission, in exercise of the powers conferred upon it under Section 12 of the Commission for Air Quality Management in National Capital Region and Adjoining Areas Act, 2021, read with the provisions of the Environment (Utilisation of Crop Residue by Thermal Power Plants) Rules, 2023, hereby directs TSPL-Vedanta to deposit Environmental Compensation of Rs. 33,02,56,800/- (Thirty three crore two lakh fifty six thousand eight hundred only), latest by 15.04.2026 and submit proof of such deposit to the Commission forthwith, failing which the said amount shall be liable to be recovered in accordance with law and the Commission shall be at liberty to initiate appropriate coercive and penal action, including proceedings under the applicable statutory provisions, without any further notice.


(R.K. Agrawal)
Director

Copy to:

1. The Chairman-cum-Managing Director PSPCL, Government of Punjab.
2. The Member Secretary, Punjab State Pollution Control Board.

Copy also to:

1. The Secretary, Ministry of Environment Forest and Climate Change
2. The Secretary, Ministry of Power
3. The Chairman, Central Pollution Control Board.


(R.K. Agrawal)
Director