



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/(PSPCL) -15930T

Dated: 01.04.2026

To,

1. Guru Hargobind Thermal Power Plant  
Punjab State Power Corporation Limited  
Through Sh. (Dr.) Basant Garg, IAS  
Chairman-cum-Managing Director  
Lehra Mohabbat  
PSEB Head Office, The Mall,  
Patiala – 147001  
E-mail: [cmd\\_pspcl@pspcl.in](mailto:cmd_pspcl@pspcl.in)
2. Guru Hargobind Thermal Power Plant  
Punjab State Power Corporation Limited  
Through Er. Tej Bansal  
Chief Engineer/ O&M  
Circle, O&M, GHPPP, Lehra Mohabbat – 151111  
District: Bathinda (Punjab)  
E-mail: [ce-ghtp@pspcl.in](mailto:ce-ghtp@pspcl.in)

**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 issuing Statutory Directions, subsequent continuous meetings / reviews, the progress of Guru Hargobind Thermal Power Plant (GHTPP) – Punjab State Power Corporation Limited (PSPCL) in ensuring the required level of co-firing has remained grossly inadequate and non-compliant;

**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 TPPs which included the TPP of PSPCL- GHTPP. Based on the said inspection, amongst other instructions, GHTPP-PSPCL 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, GHTPP- PSPCL has co-fired only 60,685.89 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 2.00% of biomass co-firing against a total of 29,71,426 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 89,143 Metric Tonnes so as to avoid imposition of stipulated environmental compensation. Therefore, due to consistent non-compliance, GHTPP- PSPCL 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 GHTPP on 22.09.2025;

**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 GHTPP 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. 4,86,57,400/- (Four crore eighty six lakh fifty seven thousand four hundred only)** is required to be imposed on GHTPP- PSPCL 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. 0.01 per unit of electricity generated)
<b>PSPCL- Lehra (920 MW)</b>	<b>29,71,426</b>	<b>89,143</b>	<b>60,685.89</b>	<b>About 2.00 %</b>	<b>4865.74</b>	<b>4,86,57,400/-</b>

**WHEREAS**, the Committee had earlier afforded GHTPP-PSPCL, an opportunity of personal hearing, during which its submissions were duly considered; and thereafter, with a view to further ensuring that GHTPP 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. 4,86,57,400/- (Four crore eighty six lakh fifty seven thousand four 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 GHTPP, including its reply dated 06.01.2026 to the Show Cause Notice dated 23.12.2025, the Committee observed that the following key issues, among others, arose for determination:



I. In the case of PSPCL, it was observed that the GHTPP achieved approximately 2.00% biomass co-firing against the stipulated minimum target of 5% for the year 2024-25. GHTPP broadly submitted the following:

- i. **Procurement Efforts:** GHTPP issued an e-tender dated 22.08.2024 for procurement of 200 MT per day biomass pellets for GHTPP. Pursuant to the tender, Purchase Orders (POs) were placed on four firms on 22.11.2024. However, despite issuance of POs at the quoted rates, the firms did not commence supply of biomass pellets. After granting sufficient time, GHTPP initiated action against the defaulting firms as per the terms and conditions of the Purchase Order-cum-Contract Agreement.
- ii. **Proposed Pellet Manufacturing Plant:** GHTPP stated that it is pursuing with NTPC Vidyut Vypar Nigam Ltd (NVVN) for setting up a non-torrefied pellet manufacturing plant of 40 MTPD capacity at GHTPP Lehra Mohabbat. However, the plant has not yet become operational due to technical constraints. It is noted that in GHTPP's reply dated 06.01.2026, no specific technical constraints or detailed issues arising therefrom were substantiated.
- iii. **Increase in Coal Consumption:** GHTPP submitted that the quantity of biomass pellets for which POs were placed in April 2024 was assessed based on average coal consumption for FY 2021-22 to 2022-23 (1,950,357 MT). However, coal consumption increased significantly to 2,971,426 MT during 2024-25 owing to higher power demand. Consequently, the percentage of biomass co-firing reduced proportionately.

II. On the above grounds, GHTPP submitted that the shortfall in achieving the minimum 3% co-firing target was attributable to external supply-side constraints and unforeseen technical variables, and not due to administrative negligence.

**WHEREAS**, the Committee carefully examined the submissions and relevant records / data and further noted that:

- I. **Adoption of Benchmark Price:** SAMARTH reiterated that the "Benchmark Price" mechanism, communicated by the MoP vide letter dated 23.08.2023,



was devised after considering appropriate margins for pellet manufacturers to reduce instances of contract failure. It has been evidenced from the performance of compliant TPPs that adoption of the Benchmark Price significantly reduces supply failures post issuance of POs. The Commission has consistently noted that non-adoption or improper adoption of the Benchmark Price is one of the principal causes for failure to secure assured pellet supplies.

- II. **Multiple Vendor Approach:** The Committee observed that compliant TPPs during 2024–25 adopted a diversified vendor strategy to mitigate supply risk. GHPPP did not adequately operationalize such multi-vendor procurement mechanism. The importance of maintaining a resilient supply chain was emphasized during review meetings held on 13.03.2024, 20.06.2024 and 30.08.2024, the minutes of which were duly circulated.
- III. **Establishment of Pellet Manufacturing Facilities:** The Commission, MoP and SAMARTH have repeatedly advised TPPs to establish in-house or proximate pellet manufacturing facilities, either independently or through third-party arrangements. Ensuring timely operationalization of such facilities was the responsibility of the concerned TPP. The proposed plant in coordination with NTPC Vidyut Vypar Nigam Ltd (NVVN) has not yet materialized and no cogent technical justification has been furnished for the delay.
- IV. **Accounting for Enhanced Coal Consumption:** The Committee noted that SAMARTH had already factored in potential variations in coal consumption and Plant Load Factor (PLF) while projecting co-firing targets. Therefore, the increase in coal consumption cannot, by itself, constitute sufficient justification for failure to meet the mandated co-firing percentage.
- V. **Past Performance and Prior Flagging:** While PSPCL's Ropar TPP eventually complied with the co-firing mandate despite initial poor performance, PSPCL–GHPPP failed to demonstrate comparable corrective action. The poor performance of PSPCL–GHPPP was flagged by the Commission to MoP, Government of India, Government of Punjab and PSPCL on multiple occasions (09.02.2024, 12.02.2024, 21.02.2024 and 27.02.2024) in relation to Commission's Direction No. 42 dated 17.09.2021.



**WHEREAS**, the Committee duly considered the response of the GHTPP-PSPCL 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 the GHTPP- PSPCL, Lehra Mohabbat TPP achieved only 2.00% biomass co-firing during FY 2024-25, thereby falling short of the statutory mandate under the Environment (Utilisation of Crop Residue by Thermal Power Plants) Rules, 2023.
- ii. The explanations advanced by GHTPP, including non-performance by vendors, delay in operationalization of the proposed pellet manufacturing plant in association with NTPC Vidyut Vypar Nigam Ltd (NVVN) and increase in coal consumption during the year, do not establish circumstances beyond its reasonable control within the meaning of Rule 5 of the Rules, 2023. The material on record indicates that:
  - a. Adoption of the Benchmark Price mechanism, as communicated by the MoP, was either delayed or ineffectively operationalized, contributing to procurement failure;
  - b. Adequate diversification of suppliers and development of a resilient procurement framework was not ensured despite repeated advisories and review meetings;
  - c. The proposed pellet manufacturing facility was not commissioned within a reasonable timeframe and no substantiated technical impediment has been demonstrated;
  - d. Variations in coal consumption and PLF are foreseeable operational parameters and were already factored into the projected co-firing targets.
- iii. The Committee further observed that no systemic or region-wide non-availability of biomass has been established. The circumstances cited reflect procurement and planning deficiencies rather than force majeure, statutory prohibition or legal impossibility.



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

**WHEREAS**, in view of the foregoing, the Committee was not satisfied that GHTPP 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 GHTPP and other material available on record, is satisfied



that adequate and sufficient opportunity of being heard was afforded to GHTPP 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 GHTPP – PSPCL to pay Environmental Compensation of Rs. 4,86,57,400/- (Four crore eighty six lakh fifty seven thousand four 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