



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/(HPGCL-PTPS) -159707

Dated: 01.04.2026

To,

1. Panipat Thermal Power Station
Haryana Power Generation Corporation Limited (HPGCL)
Through Dr. Saket Kumar, IAS
The Managing Director
Room No.411, 3rd Floor, Urja Bhawan,
C-7, Sector-6, HPGCL Panchkula;
E-mail: md@hpgcl.org.in
2. Panipat Thermal Power Station,
Through Sh. Suraj Bhan
The Chief Engineer
Village Assan, Jind Road, Panipat, Haryana, PIN - 132105
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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 PER CENT 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 also 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, M/s Panipat Thermal Power Plant (PTPS) – Haryana Power Generation Corporation Limited (HPGCL) has continuously failed to ensure co-firing of requisite / targeted biomass/ biomass-based pellets in their unit;

WHEREAS, noting a lack of implementation despite Statutory Directions, the Rules, 2023 and regular reviews, the Commission previously vide its communication bearing No. F.No.-120015/25/TPP/CAQM/(HPGCL-PTPS)/764, 767, dated 15.02.2024 notice to PTPS 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, PTPS in its reply dated 07.03.2024 submitted various reasons for the non-compliance. However, upon examination of the reply it was found that no substantial reason was explained by the PTPS, which may establish that non-compliance was due to the reason(s) 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 PTPS. Based on the said inspection, amongst other instructions, PTPS 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, PTPS has co-fired only 61809 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 1.86% of biomass co-firing against a total of 32,62,142.73 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 97,864 Metric Tonnes so as to avoid imposition of stipulated environmental compensation. Therefore, due to consistent non-compliance, M/s Panipat Thermal Power Station (PTPS) has failed to comply with the directives/ mandates of the Commission and also 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 PTPS 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 PTPS 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. 8,97,93,640/- (Eight crore ninety seven lakh ninety three thousand six hundred forty only)** is required to be imposed on PTPS 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. 0.02 per unit of electricity generated)
HPGCL, PTPS, Panipat (710 MW)	32,62,142.73	97,864	61,809	1.86 %	4489.682	8,97,93,640/-

WHEREAS, the Committee had earlier afforded PTPS, an opportunity of personal hearing, during which its submissions were duly considered; and thereafter, with a view to further ensuring that PTPS 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. 8,97,93,640/- (Eight crore ninety seven lakh ninety three thousand six hundred forty 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 PTPS, 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. **Statutory and Regulatory Constraints:** HPGCL submitted that it had co-fired 550 MT of torrefied biomass pellets during FY 2021–22 in compliance with directions of the Commission. However, pass-through of the expenditure was not initially allowed by the Haryana Electricity Regulatory Commission (HERC), despite the policy of the MoP dated 08.10.2021. HPGCL approached the Appellate Tribunal for Electricity, which directed HERC to take a decision on interim arrangement within four weeks. Subsequently, while allowing pass-through, HERC imposed conditions that biomass pellets shall be procured from within Haryana, pellet manufacturers must be situated in Haryana and co-firing shall be undertaken only after obtaining OEM approval. HPGCL submitted that compliance with these directions entailed procedural delays and created additional constraints impacting procurement during FY 2024-25.
- II. **Restriction to Torrefied Pellets and Availability Issues:** HPGCL submitted that torrefied biomass pellet manufacturing was still at a nascent stage during 2024–25. Due to non-availability of sufficient manufacturers within Haryana and lack of established technology, suppliers required time to develop adequate production capacity. Despite best efforts, HPGCL could not procure the requisite quantum of torrefied pellets.
- III. **Constraint Regarding Purchase of Parali through Agriculture Portal:** Pursuant to directions of the Hon'ble Chief Minister in the SLHPPC meeting, HPGCL issued a Purchase Order dated 10.05.2023 providing for direct payment



to farmers for paddy straw through the Agriculture & Farmers Welfare Department portal. However, the supplier faced difficulties as the portal did not have a provision for such direct payments, which was confirmed by the Agriculture Department. The State Government granted relaxation on 21.10.2024 and the Purchase Order was amended on 07.11.2024, with a copy marked to the Commission.

- IV. **District-wise Procurement Restrictions:** The engaged firm communicated difficulty in procuring paddy straw from the allocated districts. Although the constraint was eventually lifted by the State Government, approximately seven months of FY 2024–25 had already elapsed.
- V. **Cancellation of e-NITs due to Benchmark Price Direction:** An e-NIT dated 21.10.2024 was issued for procurement of 2 lakh MT torrefied biomass pellets. Subsequently, SAMARTH, considering MoP's revised biomass utilization policy, Commission's Direction No. 42 and the notification of the MoEF&CC regarding penalties for non-compliance, directed adherence to benchmark rates on 08.11.2024. MoP notified benchmark price for torrefied pellets on 18.11.2024. Consequently, the tender was cancelled. A fresh e-NIT dated 31.01.2025 for 3.55 lakh MT was issued but subsequently cancelled due to insufficient bidders.

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

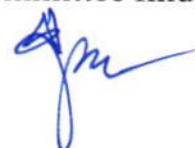
- I. **Prior Assurance and Preparedness:** The Committee noted that the Energy Department, Government of Haryana had assured on 27.02.2024 that HPGCL was fully prepared to achieve biomass co-firing targets for 2024–25. However, actual performance did not reflect adequate preparedness.
- II. **Over-Dependence on Torrefied Pellets and Single Vendor:** It was observed that the principal reason for non-compliance by PTPS was over-reliance on procurement of torrefied pellets from a single vendor and absence of diversification in procurement strategy.
- III. Repeated advisories were issued during review meetings emphasizing diversification of vendors and procurement strategy to mitigate supply risk.



- IV. **Delay in Feasibility Implementation at PTPS:** PTPS, owing to its ball & tube mill configuration, initiated a feasibility study through Bharat Heavy Electricals Limited (BHEL) for suitability of biomass co-firing. BHEL submitted its initial report in October 2022 recommending modifications in Units 7 & 8 for trial co-firing. However, correspondence dated 19.10.2022 indicated that BHEL sought confirmation regarding pellet availability for conducting trials. The requisite follow-up and operationalization remained pending at PTPS for an extended period. Only after the Commission's notice dated 15.02.2024 and the subsequent High-Level Committee visit did HPGCL complete the pending exercise and commence co-firing of torrefied pellets. The State Government of Haryana and SAMARTH were also requested to address issues of pellet and biomass availability.
- V. **Delayed Initiation and Regulatory Flagging:** The Committee observed that PTPS initiated meaningful co-firing activities only after issuance of notice dated 15.02.2024 and the High-Level Committee intervention. The performance of HPGCL TPPs had earlier been flagged by the Commission before MoP and the Government of Haryana on 12.02.2024 and 09.02.2024, respectively.

WHEREAS, the Committee duly considered the response of the PTPS 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 PTPS failed to achieve the prescribed biomass co-firing targets for FY 2024–25 under the Environment (Utilisation of Crop Residue by Thermal Power Plants) Rules, 2023.
- ii. The grounds advanced by PTPS-HPGCL, including regulatory conditions imposed by the HERC, procedural requirements relating to OEM approval, benchmark price notifications issued by the MoP, procurement constraints relating to torrefied pellets, portal-related issues concerning direct payment to farmers, district-wise procurement limitations and cancellation of tenders, do not constitute circumstances beyond its reasonable control within the meaning of Rule 5 of the Rules, 2023. The Committee finds that:



- a. Regulatory or tariff-related conditions imposed by HERC pertain to commercial recovery of expenditure and do not suspend the statutory obligation to achieve notified co-firing percentages;
 - b. The benchmark price framework was introduced to stabilize procurement and was applicable uniformly to all TPPs; tender cancellations and re-tendering processes were foreseeable procurement contingencies, which could have been mitigated through timely planning;
 - c. In the case of PTPS, delays in operationalizing feasibility recommendations and follow-up with BHEL were attributable to institutional inaction over an extended period;
 - d. Meaningful co-firing efforts were undertaken only after issuance of notice dated 15.02.2024 and intervention of the High-Level Committee, indicating reactive rather than proactive compliance.
- iii. The Committee further observed that no material has been placed on record to demonstrate force majeure, legal impossibility or any statutory prohibition preventing compliance. The constraints cited largely relate to administrative coordination, regulatory approvals, vendor management and procurement planning, which fall within the operational domain of the generating utility.
 - iv. The Committee also noted that despite advising repeatedly, PTPS of HPGCL to establish in-house or proximate pellet manufacturing facilities, PTPS of HPGCL 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 PTPS; however, notwithstanding such continued efforts, PTPS did not achieve compliance in accordance with the prescribed statutory requirements;

WHEREAS, in view of the foregoing, the Committee was not satisfied that PTPS 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:

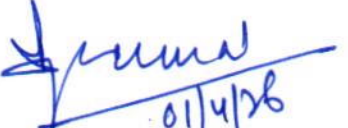
- i. The explanations and justifications advanced by the TPP are insufficient to establish that the circumstances cited were beyond their reasonable control within the meaning of Rule 5 of the Rules, 2023. The material on record does not demonstrate force majeure, statutory prohibition or legal impediment 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 PTPS and other material available on record, is satisfied that adequate and sufficient opportunity of being heard was afforded to PTPS 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 PTPS-HPGCL to deposit Environmental Compensation of Rs. **Rs. 8,97,93,640/- (Eight crore ninety seven lakh ninety three thousand six hundred forty 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.



01/4/26
(R. K. Agrawal)
Director

Copy to:

1. The Chairman, Haryana Power Generation Corporation Limited.
2. The Member Secretary, Haryana 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