COAL GASIFICATION PLANT FOR GENERATING SYNTHETIC NATURAL GAS (SNG) AT BARDHAMAN, WEST BENGAL (INDIA)

COAL GAS INDIA LIMITED (CGIL)

Date: 02.01.2026

CORRIGENDUM-III

NIT NO., : PNMM/PC-217/E/001 DATED 10.10.2025

SUB. :COAL GASIFICATION PLANT FOR GENERATING SYNTHETIC NATURAL GAS (SNG) AT BARDHAMAN, WEST BENGAL (INDIA)

This is for information to all Bidders who are willing to participate in the subject NIT, that CORRIGENDUM-III date 02.01.2026 is being issued and shall be read in conjunction to the NIT and subsequent Amendments issued till date.

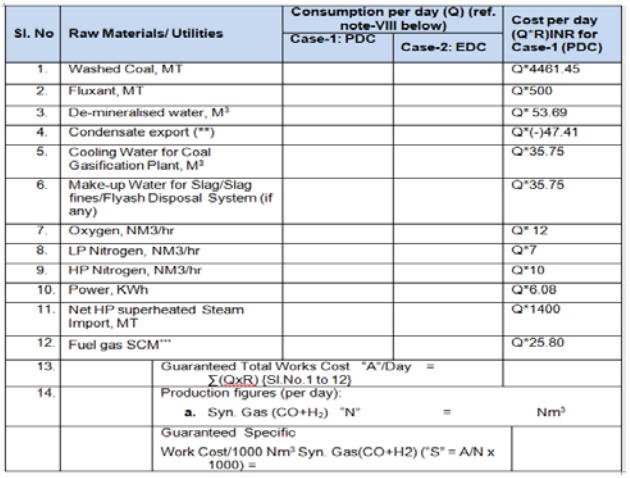
*All other terms & conditions of NIT shall be as per original NIT and subsequent Amendment(s).

For & on behalf of
COAL GAS INDIA LIMITED (CGIL)

Ritu Agarwal

(Ms. Ritu Agarwal)
Dy. General Manager & HOD (M.M)
Ph.:-+ 91-9717104054
Email: rituagarwal@pdilin.com

COAL GASIFICATION PLANT FOR GENERATING SYNTHETIC NATURAL GAS (SNG) AT BARDHAMAN, WEST BENGAL (INDIA)
(NIT NO : PNMM/PC-217/E/001)
Corrigendum -III : Technical (Process) dated 02.01.2026

SL. NO.	REFERENCE OF BIDDING DOCUMENT				AMENDMENT TYPE M/D/A	MODIFICATION
	Part/Sec.	Page No.	Clause No.	Description as per NIT		
1.	SEC-4.0	8 of 17	2.4 (Feed stock for Coal Gasification Plant)	Feed stock for Coal Gasification Plant (available coal analysis is Annexure-I.)	A	**Coal analysis Annexure-I** to Sec 4.0 (Design Basis) of NIT, is being issued for Sonepur Bazari Coal covering the following : **i. Proximate analysis of Coal Sample** **ii. Ultimate analysis of Coal Sample** **iii. Ash Fusion Temperature of Coal Sample** iv. **Ash Composition** **Annexure-I attached**
2.	SEC-8.0	4 of 14	1.1.3 (PERFORMANCE AND GUARANTEE TEST)	Works cost (Consumption of Raw material & Utilities) Guarantee:	M	

Sl. No	Raw Materials/ Utilities	Consumption per day (Q) (ref. note-VIII below)		Cost per day (Q*R)INR for Case-1 (PDC)
		Case-1: PDC	Case-2: EDC	
1.	Washed Coal, MT			Q*4461.45
2.	Fluxant, MT			Q*500
3.	De-mineralised water, M^3			Q* 53.69
4.	Condensate export (**)			Q*(-)47.41
5.	Cooling Water for Coal Gasification Plant, M^3			Q*35.75
6.	Make-up Water for Slag/Slag fines/Flyash Disposal System (if any)			Q*35.75
7.	Oxygen, NM3/hr			Q* 12
8.	LP Nitrogen, NM3/hr			Q*7
9.	HP Nitrogen, NM3/hr			Q*10
10.	Power, KWh			Q*6.08
11.	Net HP superheated Steam Import, MT			Q*1400
12.	Fuel gas SCM***			Q*25.80
13.	Guaranteed Total Works Cost "A"/Day = ∑(QxR) {Sl.No.1 to 12}			
14.	Production figures (per day): a. Syn. Gas ($CO+H_2$) "N" =			Nm^3
	Guaranteed Specific Work Cost/1000 Nm^3 Syn. Gas(CO+H2) ("S" = A/N x 1000) =			

(**) - Applicable for Gas purification unit only.
(***) - Fuel gas is considered as Natural Gas. Cost of

SL. NO.	REFERENCE OF BIDDING DOCUMENT				AMENDMENT TYPE M/D/A	MODIFICATION
	Part/Sec.	Page No.	Clause No.	Description as per NIT		
						NG is Rs. 650/mmBTU **To be read as:**

Sl. No	Raw Materials/ Utilities	Consumption per day (Q) (ref. note-VIII below)		Cost per day (Q*R)INR for Case-1 (PDC)
		Case-1: PDC	Case-2: EDC	
1.	Washed Coal, MT #			Q* **4094**
2.	Fluxant, MT			Q* 500
3.	De-mineralised water, M^3			Q* 53.69
4.	Condensate export (**)			Q* (-) 47.41
5.	Cooling Water for Coal Gasification Plant, M^3			Q***46.475**
6.	Make-up Water for Slag/Slag fines/Flyash Disposal System (if any)			Q*35.75
7.	Oxygen, **NM^3**			Q* 12
8.	LP Nitrogen, **NM^3**			Q*7
9.	HP Nitrogen, **NM^3**			Q*10
10.	Power, KWh			Q*6.08
11.	Net HP superheated Steam Import, MT			Q*1400
12.	Fuel gas SCM***			Q*25.80
13.	Guaranteed Total Works Cost "A"/Day = ∑(QxR){Sl.No.1 to 12}			
14.	Production figures (per day): a. Syn. Gas ($CO+H_2$) "N" = Nm^3			
	Guaranteed Specific Work Cost/1000 Nm^3 Syn. Gas(CO+H2) ("S" = A/N x 1000) =			

(**) - Applicable for Gas purification unit only.
(***) - Fuel gas is considered as Natural Gas. Cost of NG is Rs. 650/mmBTU.
(#) - Unit Rate of washed coal is excluding taxes & royalty.

<table>
<tr><th rowspan="2">SL. NO.</th><th colspan="4">REFERENCE OF BIDDING DOCUMENT</th><th rowspan="2">AMENDMENT TYPE M/D/A</th><th rowspan="2">MODIFICATION</th></tr>
<tr><th>Part/Sec.</th><th>Page No.</th><th>Clause No.</th><th>Description as per NIT</th></tr>
<tr><td>3.</td><td>4.0 (Design Baisis)</td><td>16 of 17</td><td>7.0</td><td>CLIMATIC DATA</td><td>A</td><td>Bidder to collect the below mentioned climatic data from concerned IMD office.

To be read as

The climatic data furnished below is for reference purpose only, bidder to collect the climatic data from concerned IMD office:</td></tr>
<tr><td>4.</td><td>4.0 (Design Baisis)</td><td>16 of 17</td><td>7.1 (Wind)</td><td>CLIMATIC DATA</td><td>A</td><td>Based on the data collected from <u>01.01.2025 to 18.12.2025</u> following regarding wind speed at Sonepur Bazari is provided:

<table>
<tr><th>Sl No.</th><th>Description</th><th>CAAQMS-Wind_Speed_U (m/s)</th></tr>
<tr><td>1.</td><td>Maximum Value</td><td>0.6</td></tr>
<tr><td>2.</td><td>Maximum Value At Time</td><td>2025-04-01</td></tr>
<tr><td>3.</td><td>Minimum Value</td><td>0.3</td></tr>
<tr><td>4.</td><td>Minimum Value At Time</td><td>2025-09-01</td></tr>
<tr><td>5.</td><td>Geometric Mean</td><td>0.42</td></tr>
<tr><td>6.</td><td>Median</td><td>0.45</td></tr>
<tr><td>7.</td><td>Standard Deviation</td><td>0.11</td></tr>
<tr><td>8.</td><td>Valid Data Points</td><td>12</td></tr>
<tr><td>9.</td><td>Total Data Points</td><td>12</td></tr>
<tr><td>10</td><td>Data Availability %</td><td>100</td></tr>
</table>

Wind Load Design: as defined in IS: 875 Part 3</td></tr>
</table>

<table>
<tr><th rowspan="2">SL. NO.</th><th colspan="4">REFERENCE OF BIDDING DOCUMENT</th><th rowspan="2">AMENDMENT TYPE M/D/A</th><th rowspan="2">MODIFICATION</th></tr>
<tr><th>Part/Sec.</th><th>Page No.</th><th>Clause No.</th><th>Description as per NIT</th></tr>
<tr><td>5.</td><td>4.0 (Design Baisis)</td><td>17 of 17</td><td>7.2 (Air Temperature)</td><td>CLIMATIC DATA</td><td>A</td><td>
Air Temperature

Based on the data collected from 01.01.2025 to 18.12.2025 following regarding Ambient Temperature at Sonepur Bazari is provided:

Table: A
<table>
<tr><th>Parameters</th><th>Temperature, °C</th></tr>
<tr><td>Dry bulb (Summer)</td><td>39°C</td></tr>
<tr><td>Dry bulb (Winter)</td><td>13.7°C</td></tr>
<tr><td>Average Temperature</td><td>26.52°C (Geometric Mean)</td></tr>
</table>
Table:B
<table>
<tr><th>Sl. No.</th><th>Description</th><th>CAAQMS-Ambient Temperature_U(Deg. Celsius)</th></tr>
<tr><td>1.</td><td>Maximum Value</td><td>31</td></tr>
<tr><td>2.</td><td>Maximum Value At Time</td><td>2025-04-01</td></tr>
<tr><td>3.</td><td>Minimum Value</td><td>18.6</td></tr>
<tr><td>4.</td><td>Minimum Value At Time</td><td>2025-01-01</td></tr>
<tr><td>5.</td><td>Geometric Mean</td><td>26.8</td></tr>
<tr><td>6.</td><td>Median</td><td>28.65</td></tr>
<tr><td>7.</td><td>Standard Deviation</td><td>4.39</td></tr>
<tr><td>8.</td><td>Valid Data Points</td><td>12</td></tr>
<tr><td>9.</td><td>Total Data Points</td><td>12</td></tr>
<tr><td>10</td><td>Data Availability %</td><td>100</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th rowspan="2">SL. NO.</th><th colspan="4">REFERENCE OF BIDDING DOCUMENT</th><th rowspan="2">AMENDMENT TYPE M/D/A</th><th rowspan="2">MODIFICATION</th></tr>
<tr><th>Part/Sec.</th><th>Page No.</th><th>Clause No.</th><th>Description as per NIT</th></tr>
<tr><td>6.</td><td>4.0 (Design Baisis)</td><td>17 of 17</td><td>7.2.1 (Atmospheric Air Composition)</td><td>CLIMATIC DATA</td><td></td><td>Atmospheric Air Composition

Online pollution monitoring report from 01.02.2025 To Date: 07.11.2025 is attached as Annexure-AA for reference.</td></tr>
<tr><td>7.</td><td>4.0 (Design Baisis)</td><td>17 of 17</td><td>7.3 (Relative Humidity)</td><td>CLIMATIC DATA</td><td>A</td><td>Relative Humidity

Based on the data collected from <u>01.01.2025 to 18.12.2025</u> following regarding Relative Humidity at Sonepur Bazari is provided:
<table>
<tr><th>Sl. No.</th><th>Description</th><th>CAAQMS-Relative humidity _U (%)</th></tr>
<tr><td>1.</td><td>Maximum Value</td><td>89.3</td></tr>
<tr><td>2.</td><td>Maximum Value At Time</td><td>2025-07-01</td></tr>
<tr><td>3.</td><td>Minimum Value</td><td>58.1</td></tr>
<tr><td>4.</td><td>Minimum Value At Time</td><td>2025-03-01</td></tr>
<tr><td>5.</td><td>Geometric Mean</td><td>77.04</td></tr>
<tr><td>6.</td><td>Median</td><td>78.05</td></tr>
<tr><td>7.</td><td>Standard Deviation</td><td>9.76</td></tr>
<tr><td>8.</td><td>Valid Data Points</td><td>12</td></tr>
<tr><td>9.</td><td>Total Data Points</td><td>12</td></tr>
<tr><td>10</td><td>Data Availability %</td><td>100</td></tr>
</table></td></tr>
<tr><td>8.</td><td>4.0 (Design Baisis)</td><td>17 of 17</td><td>7.4 (Rainfall)</td><td>CLIMATIC DATA</td><td>A</td><td>Rainfall:

Based on the data collected from <u>01.01.2025 to 18.12.2025</u> following regarding Rainfall at Sonepur Bazari is provided:</td></tr>
</table>

<table>
<tr><th rowspan="2">SL. NO.</th><th colspan="4">REFERENCE OF BIDDING DOCUMENT</th><th rowspan="2">AMENDMENT TYPE M/D/A</th><th rowspan="2">MODIFICATION</th></tr>
<tr><th>Part/Sec.</th><th>Page No.</th><th>Clause No.</th><th>Description as per NIT</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td>
<table>
<tr><th>Sl. No.</th><th>Description</th><th>CAAQMS-Rain_fall_U(mm/hr))</th></tr>
<tr><td>11.</td><td>Maximum Value</td><td>10.3</td></tr>
<tr><td>12.</td><td>Maximum Value At Time</td><td>2025-10-01</td></tr>
<tr><td>13.</td><td>Minimum Value</td><td>0.1</td></tr>
<tr><td>14.</td><td>Minimum Value At Time</td><td>2025-05-01</td></tr>
<tr><td>15.</td><td>Geometric Mean</td><td>1.59</td></tr>
<tr><td>16.</td><td>Median</td><td>0.7</td></tr>
<tr><td>17.</td><td>Standard Deviation</td><td>2.83</td></tr>
<tr><td>18.</td><td>Valid Data Points</td><td>12</td></tr>
<tr><td>19.</td><td>Total Data Points</td><td>12</td></tr>
<tr><td>20.</td><td>Data Availability %</td><td>100</td></tr>
</table>
</td></tr>
<tr><td>9.</td><td>4.0 (Design Baisis)</td><td>17 of 17</td><td>7.5 (Barometric Pressure)</td><td>CLIMATIC DATA</td><td>A</td><td>Ambient Pressure :

Based on the data collected from <u>01.01.2025 to 18.12.2025</u> following regarding Ambient Pressure at Sonepur Bazari is provided:
<table>
<tr><th>Sl. No.</th><th>Description</th><th>CAAQMS-Ambient Pressure_U(hPa)</th></tr>
<tr><td>1.</td><td>Maximum Value</td><td>1004.4</td></tr>
<tr><td>2.</td><td>Maximum Value At Time</td><td>2025-12-01</td></tr>
<tr><td>3.</td><td>Minimum Value</td><td>987.3</td></tr>
<tr><td>4.</td><td>Minimum Value At Time</td><td>2025-07-01</td></tr>
<tr><td>5.</td><td>Geometric Mean</td><td>996.28</td></tr>
<tr><td>6.</td><td>Median</td><td>997.6</td></tr>
<tr><td>7.</td><td>Standard Deviation</td><td>5.62</td></tr>
<tr><td>8.</td><td>Valid Data Points</td><td>12</td></tr>
<tr><td>9.</td><td>Total Data Points</td><td>12</td></tr>
<tr><td>10.</td><td>Data Availability %</td><td>100</td></tr>
</table>
</td></tr>
</table>

LEGEND:

M: MODIFICATION, A: ADDITION, D: DELETION.

Encls.:

- **Annexure-I**
- **Annexure-AA**

Annexure-I

Table-1
Proximate Analysis of Coal Sample

Sl. No.	PARTICULARS	Proximate Analysis of Coal (Air Dry Basis)
1.	Moisture %	5.6-6.3
2.	Ash %	14.9-18.4
3.	VM %	29.7-31.8
4.	FC %	46.3-47.0
5.	GCV kcal/kg	6068-6250
6.	HGI	78-82

Table-2
Ultimate Analysis of Coal Sample

Sl. No.	PARTICULARS	COAL
1.	Carbon %	60.98-61.59
2.	Hydrogen %	4.81- 5.18
3.	Nitrogen %	1.65- 1.66
4.	Sulphur %	0.37-0.39

Table-3
Ash Fusion Temperature of Coal Sample

Sl. No.	PARTICULARS	COAL
1.	IDT(^{0}C)	>1400
2.	ST(^{0}C)	>1400
3.	HT(^{0}C)	>1400
4.	FT(^{0}C)	>1400

Abbreviations used: **IDT**: Initial deformation temperature, **ST**: sphere temperature **HT:** hemisphere temperature, **FT**: flow temperature

Table-4
Ash Composition

Sl. No.	PARTICULARS	Ash Composition
	Ash Composition:	
i.	SiO_2	62.0-62.5
ii.	Al_2O_3	22.4-23.1
iii.	Fe_2O_3	4.6- 4.7
iv.	CaO	2.8 -3.0
v.	MgO	0.4 -0.5
vi.	Na_2O	0.1
vii.	K_2O	2.2 -2.3
viii.	TiO_2	2.2 -2.7
ix.	Mn_3O_4	0.1
x.	SO_3	0.1
xi.	P_2O_5	1.6 -1.7

Site Name: EASTERN COALFIELD LTD,SB MINES,Sonepur Bazari															
From Date: 2025/02/01 To Date: 2025/11/07															
Online Pollution Monitoring															
Sl No.	Time	CAAQMS-SO2_U	CAAQMS-NOx_U	CAAQMS-NO_U	CAAQMS-NO2_U	CAAQMS-CO_U	CAAQMS-PM2.5_U	CAAQMS-PM10_U	CAAQMS-Wind_Speed_U (m/s)	CAAQ MS-Wind_Direction_U (degree)	CAAQMS-Ambient Tempe (deg C)	CAAQMS-Relative humidity_U (%)	CAAQMS-Rain_fall_U (mm/hr)	CAAQMS-Solar Radiation_U (W/m2)	CAAQMS-Ambient Pressure_U (hPA)
1	2025-02-01	17.1	78.7	52.4	26.5	0.9	100.5	226.4	0.4	108.4	22.5	64.8	1.3	104.1	1002.1
2	2025-03-01	16.5	35.1	31.7	3.5	0.9	86	260.8	0.5	136.1	27.2	58.1	0.4	133	998.9
3	2025-04-01	15.3	45.5	39.6	5.9	0.7	52.7	171.9	0.6	131.9	31	67.6	2.3	148.9	996.4
4	2025-05-01	15	42.3	37.7	4.7	0.5	45.1	91.5	0.5	119.8	30.7	75.7	0.1	163.7	992.1
5	2025-06-01	14.9	37.7	34.9	10.1	0.3	42.9	92.1	0.5	107.8	30.8	82.5	0.5	119.4	988.4
6	2025-07-01	14.6	55.2	37.7	17.5	0.1	31.1	60.3	0.5	95.2	29.3	89.3	0.2	103.7	987.3
7	2025-08-01	20.6	48	33.5	14.5	0.2	35.2	74.8	0.5	103.8	29.4	87.6	0.1	123.1	991.7
8	2025-09-01	15.1	76.5	43.2	33.5	0.5	43.6	96.7	0.3	72.1	30	86.2	0.1	124.2	993.8
9	2025-10-01	15.6	191.8	50.1	141.7	0.7	65.1	138.3	0.3	90.2	28	83.6	10.3	110.9	998.8
10	2025-11-01	15.5	230.9	48.1	182.8	0.8	141	195.8	0.3	122.7	25.2	84.4	1.1	101.3	997.5
12	Maximum Value	20.6	230.9	52.4	182.8	0.9	141	260.8	0.6	136.1	31	89.3	10.3	163.7	1002.1
13	Maximum Value At Time	2025-08-01	2025-11-01	2025-02-01	2025-11-01	2025-02-01	2025-11-01	2025-03-01	2025-04-01	2025-03-01	2025-04-01	2025-07-01	2025-10-01	2025-05-01	2025-02-01
14	Minimum Value	14.6	35.1	31.7	3.5	0.1	31.1	60.3	0.3	72.1	22.5	58.1	0.1	101.3	987.3
15	Minimum Value At Time	2025-07-01	2025-03-01	2025-03-01	2025-03-01	2025-07-01	2025-07-01	2025-07-01	2025-09-01	2025-09-01	2025-02-01	2025-03-01	2025-05-01	2025-11-01	2025-07-01
16	Geometric Mean	16.02	84.17	40.89	44.07	0.56	64.32	140.86	0.44	108.8	28.41	77.98	1.64	123.23	994.7
17	Median	15.4	51.6	38.65	16	0.6	48.9	117.5	0.5	108.1	29.35	83.05	0.45	121.25	995.1
18	Standard Deviation	1.78	69.25	7.24	63.76	0.29	34.97	69.37	0.11	19.71	2.77	10.87	3.12	20.52	4.84

19	Valid Data Points	10	10	10	10	10	10	10	10	10	10	10	10	10	10
20	Total Data Points	10	10	10	10	10	10	10	10	10	10	10	10	10	10
21	Data Availablity %	100	100	100	100	100	100	100	100	100	100	100	100	100	100