

नॉर्थ ईस्ट्रनं इलैक्ट्रिक पावर कॉरपोरेशन लिमिटेड म् र्य सरकार का अंतकम

NORTH EASTERN ELECTRIC POWER CORPORATION LTD.

ISO 9001-14001 ISO - 45001

(A Govt. of India Enterprise)

Miniratna Category - I

OFFICE OF THE HEAD OF PROJECT 135 MW AGTCCPP, NEEPCO LTD., RAMCHANDRANAGAR, TRIPURA (WEST),

Email: hopofficeagtp@gmail.com

NO. NEEPCO/AGTCCPP/HOP/T-25(D)/VOL-I/2019-2020/ 32

DATE: 08/05/2019

The Principal Chief Conservator of Forests(C), Govt. of India, Ministry of Environment & Forests, North Eastern Regional Office, Low-U-Sib, Lumbatngen, Near MTC Workshop, Shillong - 793 021.

> Sub: 135 MW Agartala Gas Turbine Combined Cycle Power Plant - Six Monthly Report on status of Environment Clearance (1st Oct, 2018 to 31st March, 2019).

Sir,

This has reference to the Office Memorandum No.J-1311/1/92-IA Dtd.23/01/1992 of the MOE&F, Govt. of India conveying the Environment Clearance and adherence to the various referred conditions, the

status	Report of compliance on conditions by this Project are as u	
SI. No.	Stipulations as brought out under Memorandum No.J- 13011/1/IA Dtd.23/01/1992 of the MOE&F, Govt. of India	Status of compliance by Agartala Gas Turbine Combined Cycle Power Plant of NEEPCO
2(i)	Only natural gas is used in the main feed stock.	Only natural gas is used in the main feed stock.
(ii)	Zero discharge concepts with respect to liquid effluents may be followed and as such no liquid effluent will be allowed to be discharged in the water bodies. Treated liquid effluent should be used/recycled in the plant/irrigation of the green belt/agricultural fields etc.	After commissioning of STGs in 2015-16 liquid effluent is generated and discharged in environment after proper treatment. A scheme is already envisaged to recycle the treated effluent water.
(iii)	Adequate steps should be taken for presentation and control of fire and explosion hazards likely to be caused due to storage and used of inflammable materials like natural gas.	Fire protection system for machine already exists. Fire tenders from Tripura State Fire Service Stationed in Plant area all the round to combat fire.
(iv)	Affected families due to acquisition of land should be properly compensated in consultation with the State Govt.	The land has been purchased directly from the Govt. of Tripura and no families have been affected due to the acquisition.
(v)	The NOX emissions should be exceed the specified standards of 50 ppm. As the site is located within 25 km. of the sanctuary.	The NOX emission is below 50 ppm.
(vi)	The gaseous emissions from various units should conform to the standards prescribed by the concerned authorities from time to time. At no time the emission level should be beyond the stipulated standards. In the event of failure of any	These parameters are within stipulated norms.

CIN NO.U40101ML1976G01001658

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	pollution control system adopted by the unit, the respective unit should be shutdown and should not be restarted until the control measure are rectified to achieve the desired standard efficiency.	KSETEAS KILKOK,
(vii)	Adequate No. of Monitoring stations should be provided in consultation with the state Pollution control Board. Further, stack emissions should be monitored periodically. The date of stack emissions and ambient air quality should be sent to the State Pollution Control Board once in 3 months and to this Ministry once in 6 months.	Action has been taken to monitor. Quality of water is monitored at regular interval. There is minimum sound noise beyond the Power House. After installation of CEMS and online data uploading, stack emission can be viewed online on Real Time basis by CPCB and SPCB.
(viii)	A green belt of adequate width not less than 100 meters) and density should be provided all around the Power station.	A green belt with an average width of 100 meters around Power Station including office and Colony Complex with plantation of 45,081 (approx.) plants are maintained.
(ix)	A separate Environment Management Cell with suitably qualified staff to carry out the various functions should be set up under the control of Senior Executives, who will report directly to the Head of the Organization.	An Environment Management Cell is working in the Plant.
3.	Adequate financial provision should be made for implementation of these stipulations and the details of such provisions communicated to this Ministry within three months Financial provisions so made will not be utilized for any other purpose.	Funds are available.

We are also enclosing herewith the test reports (as given below) which was carried out by the Green Tech Environmental Engineer & Consultants, Guwahati in the month of **Nov,2018**.

Assuring our best commitments.

Thanking you,

Enclo:-

- 1) Test Report of Sound Level Monitoring.
- 2) Test Report of Ambient Air.
- 4) Water Test Report.

Yours faithfully,

Head of Project,

AGTCCPP, NEEPCO Ltd., R.C. Nagar, Tripura (West).

(25 0)

ग्रीन टेक एनवायर्नमेंटल इंजीनियर और कंसल्टेंट्स GREEN TECH ENVIRONMENTAL ENGINEER & CONSULTANTS

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House No-11, Champak nagar, Narayan Path, Bhetapara, Guwahati-781028, www.greentecheec.in Telefax -0361 2300278 Mobile: 9435046677, 9954089052, E-mail: green_pranjal@hotmail.com, info@greentecheec.in

Format No.: GEEC/FM/48

TEST REPORT

Test Report No:	GEEC/AAQM/2018/11/07	Date of Reporting:	28/11/2018	
Customer Name:	Agartala Gas Turbine Combined Cycle Power Plant	Lab. ID No.:	GEEC/AA/20	018/11/07
Customer Address:	Agartala Gas Turbine Combined Cycle Power Plant Ramchandranagar PO NEEPCO, Agartala, Tripura (W)-79908	Date of Sampling:	16/11/2018 t	0 17/11/2018
Sampling Location:	Guest House (Colony)		Max.	Min.
Wind Direction/ Weather Condition:	Calm and Clear	Ambient Temperature:		16.7°C
Sampling Condition:	In GFA and PTFE Filter Paper	Sample Receipt Date:	19/11/2018	
Equipments Details:	RDS and ADS Fine Dust Sampler	Test Start Date:	19/11/2018	
Monitored By:	Mr. D. Deka	Test End Date:	26/11/2018	

AMBIENT AIR QUALITY

Sampling and Analysis carried out as per GEEC/SOP/01

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Parameters	Unit	Results	Limits	Test Method
Particulate Matter (PM ₁₀)	μg/m³	65	100	IS 5182(23)
Particulate Matter (PM _{2.5})	µg/m³	38	60	CPCB Guidelines
Sulphur Dioxide (SO ₂)	μg/m³	5	80	IS 5182(2)
Nitrogen Dioxide (NO ₂)	µg/m³	9	80	IS 5182(VI)
Lead (Pb)	µg/m³	<0.01	1	IS 5182(22)
	Particulate Matter (PM ₁₀) Particulate Matter (PM _{2.5}) Sulphur Dioxide (SO ₂) Nitrogen Dioxide (NO ₂)	ParametersUnitParticulate Matter (PM10)μg/m³Particulate Matter (PM2.5)μg/m³Sulphur Dioxide (SO2)μg/m³Nitrogen Dioxide (NO2)μg/m³	Parameters Unit Results Particulate Matter (PM10) μ g/m³ 65 Particulate Matter (PM2.5) μ g/m³ 38 Sulphur Dioxide (SO2) μ g/m³ 5 Nitrogen Dioxide (NO2) μ g/m³ 9	Particulate Matter (PM ₁₀) μ g/m ³ 65 100 Particulate Matter (PM _{2.5}) μ g/m ³ 38 60 Sulphur Dioxide (SO ₂) μ g/m ³ 5 80 Nitrogen Dioxide (NO ₂) μ g/m ³ 9 80

******* End of Report**********

Authorised by: Lab -in-Charge

(Dr. Belinda Lahon)

The parameters tested on the specific date are found to be within the NATIONAL AMBIENT AIR QUALITY STANDARDS, CPCB NOTIFICATION DATED 18TH NOVEMBER, 2009.

^{*} The results relate only to the item tested.

^{*} The test report shall not be reproduced except in full, without written approval of the laboratory .

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Format No.: GEEC/FM/48

TEST REPORT

Test Report No:	GEEC/AAQM/2018/11/08	Date of Reporting:	28/11/2018	
Customer Name:	Agartala Gas Turbine Combined Cycle Power Plant	Lab. ID No.:	GEEC/AA/2018/11	
Customer Address:	Agartala Gas Turbine Combined Cycle Power Plant Ramchandranagar PO NEEPCO, Agartala, Tripura (W)-79908	Date of Sampling:	17/11/2018 to 18/11/201	
Sampling Location:	Agartala Guest House		Max.	Min.
Wind Direction/ Weather Condition:			25.5°C	16.8°C
Sampling Condition:	In GFA and PTFE Filter Paper	Sample Receipt Date:	19/11/2018	
Equipments Details:	RDS and ADS Fine Dust Sampler	Test Start Date:	19/11/2018	
Monitored By:	Mr. D. Deka	Test End Date:	26/11/2018	

AMBIENT AIR QUALITY

Sampling and Analysis carried out as per GEEC/SOP/01

SI. No.	Parameters	Unit	Results	Limits	Test Method
1	Particulate Matter (PM ₁₀)	μg/m³	75	100	IS 5182(23)
2	Particulate Matter (PM _{2.5})	µg/m³.	43	60	CPCB Guidelines
3	Sulphur Dioxide (SO ₂)	μg/m³	6	80	IS 5182(2)
4	Nitrogen Dioxide (NO ₂)	μg/m³	10	80	IS 5182(VI)
5	Lead (Pb)	μg/m³	<0.01	1	IS 5182(22)

* End of Report***********

Authorised by: Lab -in-Charge

(Dr. Belinda Lahon)

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Format No.: GEEC/FM/48

TEST REPORT

URL NO.: TC599118				
Test Report No:	GEEC/AAQM/2018/11/06	Date of Reporting:	28/11/2018	
Customer Name:	Agartala Gas Turbine Combined Cycle Power Plant	Lab. ID No.:	GEEC/AA/20)18/11/06
Customer Address:	Agartala Gas Turbine Combined Cycle Power Plant Ramchandranagar PO NEEPCO, Agartala, Tripura (W)-79908	Date of Sampling:	16/11/2018 t	o 17/11/2018
Sampling Location:	Near Power House		Max.	Min.
Wind Direction/ Weather Condition:			25.1°C	16.7°C
Sampling Condition:	In GFA and PTFE Filter Paper	Sample Receipt Date:	19/11/2018	
Equipments Details:	RDS and ADS Fine Dust Sampler	Test Start Date:	19/11/2018	
Monitored By:	Mr. D. Deka	Test End Date:	26/11/2018	

AMBIENT AIR QUALITY

Sampling and Analysis carried out as per GEEC/SOP/01

SI. No.	Parameters	Unit	Results	Limits	Test Method
1	Particulate Matter (PM ₁₀)	μg/m ³	72	100	IS 5182(23)
2	Particulate Matter (PM _{2.5})	μg/m ³	40	60	CPCB Guidelines
3	Sulphur Dioxide (SO ₂)	μg/m³	7	80	IS 5182(2)
4	Nitrogen Dioxide (NO ₂)	μg/m³	12	80	IS 5182(VI)
5	Lead (Pb)	μg/m³	<0.01	1	IS 5182(22)

* End of Report***********

Authorised by: Lab -in-Charge

(Dr. Belinda Lahon)

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Format No.: GEEC/FM/49

TEST REPORT

Ref. No.: GEEC/W/201	8/11/06	Date of Reporting:	28/11/2018
Customer Name:	Agartala Gas Turbine Combined Cycle Power Plant	Lab. ID No.:	GEEC-WS/18/11/06
Customer Address:	Agartala Gas Turbine Combined Cycle Power Plant Ramchandranagar PO NEEPCO, Agartala, Tripura (W)-79908	Date of Sampling:	17/11/2018
Sampling Location:	Boiler 1 & 2 (Outlet)	Sample Receipt Date:	19/11/2018
Sample Description:	Water	Test Start Date:	19/11/2018
Sample Drawn By:	Mr. D. Deka	Test Completion Date:	26/11/2018
Sample Condition:	Sealed	Sampling Method:	GEEC/SOP/02

SI. No.	DESCRIPTION	METHOD	UNIT	RESULTS	LIMITS
1	рН	APHA 22nd Edition, 2012	-	9.01	IS:10496-1983 8.5-9.5
2	TDS	DS APHA 22nd Edition, 2012 mg/l		BDL	0.05
4 Iron A		APHA 22nd Edition, 2012	mg/l	BDL	V.05
		APHA 22nd Edition, 2012	mg/l	<0.01	0.01
		APHA 22nd Edition, 2012	mg/l	0.01	0.3
6	Chloride	APHA 22nd Edition, 2012	mg/l	2	4

Authorised by: Laboratory In-charge

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(Dr. Belinda Lahon)

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^{*} The results relate only to the item tested.

^{*} BDL = Below Detection Limit, TDS = 1 mg/l, Hardness = 1 mg/l.

^{*} The parameter marked with * are not under the scope of NABL.

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Format No:GEEC/FM/47A URL NO.: TC599118000000234F Report No:GEEC/FL/22/SLM/2018/11/5/02 Date: 05/12/2018 Name of the Industry Agartala Gas Turbine lahld. GEEC/SLM/2018/11/05 Combined Cycle Power Address NEEPCO Limited, AGTCCPP, Ramchandranagar, Tripura (West) Noise Level Report Monitoring Location: Plant Date of Monitoring: 17/11/2018 Weather/Wind: Calm & Clear Sound Level Meter SLM-100. Model Envirotech Monitored By: Mr. Dilip Deka SI.No. 13-DTH-2007 Calibration certificate No: ECL/GTEE/2018-19/MECH/1115 Calibration valid 12/07/2019 Measurement Results SI. No. Location Sound Parameters Leq (dBA) 1 Machin Hall Unit 86.4 2 Between Boiler 2 & 3 83.2 3 Between Boiler 1 & 2 828 4 Between Boiler 3 & 4 80.6 5 Near DM Water Plant 74.6 Cooling Tower 89.6 7 STG 2 Turbine -2 93.4 8 GT corridor 71.4 GT Control Room 63.4 10 Machine Hall Front 69.8 Plant Gate 60.8 Authorised by: CEO

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(Pranjal Buragohain)



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Format No:GEEC/FM/47A

eport	No:GEEC/FL/22/SLM	/2018/11/5/01	Date:	05/12/20)18
C		Agartala Gas Turbine Combined Cycle Power Plant	Lab ld.:		SLM/2018/11/05
ddres	SS	NEEPCO Limited, AGTCCP	THE R. P. LEWIS CO., LANSING, SALES,	dranagar, T	ripura (West)
		Noise Level Re			T
/onito	oring Location:	Office & Residential Area	Date of Mo		17/11/2018
Veath	ner/Wind:	Calm & Clear	Sound Leve Model	el Meter	SLM-100, Envirotech
Monito	ored By:	Mr. Dilip Deka	SI.No.		13-DTH-2007
Calibr	ation certificate No:	ECL/GTEE/2018-19/MECH/1115	Calibration	valid upto:	12/07/2019
		Measurement Re	esults		
SI.			Sound Parameters Leq (dB Day Time Night		eters Leq (dBA)
No.	Location				Night Time
1	Guest House		52.6		44.4
2	B Type (B9AB & B4A/B)		51.6		39.6
3	Main Gate			55.0	37.8
4	Park		54.5		42.4
5			52.7	38.6	
6	Near WTP Gate		50.8		40.2
7	Near A type (34 A/B)	A STATE OF THE PARTY OF T	54.6		37.8
8	Near A type (39 A/B	& 36 A/B))	53.8		38.2
9	Shiv Mandir Area			50.9	37.8
10	Near C Type (C-10/	11)		52.6	38.6
11	1 Near Welfare Centre		54.8		37.8
12	Near C Type (C-1)			53.8	38.6
	nark:	Noise level recorded are c	omplied with t	he CPCB Lir	mit Day time Leq < 55

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