भारत सरकार Government of India
विद्युत मंत्रालय Ministry of Power
उत्तर पूर्वी क्षेत्रीय विद्युत समिति
North Eastern Regional Power Committee
एन ई आर पी सी कॉम्प्लेक्स, डोंग पारमाओ, लापालाङ, शिल्लोंग-७९३००६, मेघालय
NERPC Complex, Dong Parmaw, Lapalang, Shillong - 793006, Meghalaya

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No.: NERPC/COM/CC_Min/2016/*4973-5019* Dated: 15th March 2017

To

1. Director (Distribution), MePDCL, Lumjingshai, Short Round Road,Shillong – 793 001
2. Director (Transmission), MePTCL, Lumjingshai, Short Round Road,Shillong – 793 001
3. Director (Generation), MePGCL, Lumjingshai, Short Round Road,Shillong – 793 001
4. Engineer-in-Chief (P&ED), Govt. of Mizoram, New Secretariat Complex, Khatla, Aizawl – 796 001
5. Chief Engineer (WE Zone), Department of Power,Govt. of Arunachal Pradesh,Itanagar- 791 111
6. Chief Engineer (EE Zone), Department of Power,Govt. of Arunachal Pradesh,Itanagar- 791 111
7. MD, APDCL, Bijuli Bhawan, Paltan Bazar, Guwahati-781 001
8. MD, AEGCL, Bijuli Bhawan, Paltan Bazar,Guwahati-781 001
9. MD, APGCL, Bijuli Bhawan, Paltan Bazar,Guwahati-781 001
10. MD, MSPDCL, Secure Office Building Complex, 3rd Floor, South Block, Near 2nd MR Gate, Imphal – 795 001
11. MD, MSPCL, Keishampat, Imphal – 795 001
12. Chief Engineer (P&E), Department of Power, Govt. of Nagaland, Kohima – 797 001
13. Director (Tech), TSECL, Banamalipur, Agartala – 799 001
14. Director (Tech), TPGL, Banamalipur, Agartala – 799 001
15. ED, NERTS, PGCIL, Dongtieh-Lower Nongrah, Lapalang, Shillong -793 006
16. GM (LD&C), PGCIL, "Saudamini" Plot No. 2, Sector – 29, Gurgaon, Haryana – 122 001
17. General Manager, NERLDC, Dongtieh-Lower Nongrah, Lapalang, Shillong -793 006
18. ED (Commercial), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
19. ED (O&M), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
20. ED (Commercial), NHPC, NHPC Office Complex, Sector-33, Faridabad, Haryana-121003
21. ED (O&M), NHPC, NHPC Office Complex, Sector-33, Faridabad, Haryana-121003
22. GM (Comml), NTPC Limited, ER-II HQ, Plot No. N-17/2, Third Floor, Naya Palli, Bhubaneswar-751012
23. Group GM, NTPC Limited, Bongaigaon Thermal Power Project, P.O. Salakati, Kokrajhar-783369
24. MD, OTPC, 6th Floor, A Wing, IFCI Tower-61, Nehru Place, New Delhi-110019
25. Vice President, PTCIL, 2nd Floor, NBCC Tower, 15, Bhikaji Cama Place, New Delhi - 110066
26. AGM (BD), NVVN, Core 5, 3rd floor, Scope Complex, 7 Institutional Area, Lodhi Rd., N. Delhi-3
27. Member Secretary, ERPC, 14 Golf Club Road, Tollygunge, Kolkata-700033
28. Chief Engineer, GM Division, CEA, Sewa Bhawan, R.K. Puram, New Delhi – 110066

Sub: Minutes of the 32nd CC meeting held on 22/02/2017 at "Toshali Sands, Puri", Odisha.

Please find enclosed herewith the minutes of the 32nd Commercial Committee Meeting held at "Toshali Sands, Puri", Odisha on 22nd February 2017 for your kind information and further necessary action.

Encl.: As above

भवदीय / Yours faithfully,

लिंगखोइ / B. Lyngkhoi)
निदेशक / Director/S.E (Comml)

Copy To:

1. SA to Member(GO&D), CEA, Sewa Bhawan, R.K. Puram, New Delhi – 110066
2. CGM (Comml), APDCL, Bijuli Bhawan, Paltan Bazar, Guwahati-781 001
3. Head of SLDC, SLDC Complex, AEGCL, Kahilipara, Guwahati - 781019
4. SE (EM), MePDCL, Lumjingshai, Short Round Road, Shillong – 793 001
5. Head of SLDC, MePTCL, Lumjingshai, Short Round Road,Shillong – 793 001
6. Head of SLDC, Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791 111
7. ED (Comml), MSPDCL, Secure Office Building Complex, 3rd Floor, South Block, Near 2nd MR Gate, Imphal – 01
8. ED (Tech), MSPDCL, Secure Office Building Complex, 3rd Floor, South Block, Near 2nd MR Gate, Imphal – 01
9. ED (Tech), MSPCL, Keishampat, Imphal – 795 001
10. S.E. (Commercial), Department of Power, Govt. of Mizoram, Khatla, Aizawl – 796 001
11. Head of SLDC, Department of Power, Govt. of Mizoram, Aizawl – 796 001
12. A.C.E. (Gen & Trans), Department of Power, Govt. of Nagaland, Kohima – 797 001
13. Head of SLDC, Department of Power, Dimapur, Nagaland
14. AGM (C&SO), TSECL, Agartala – 799 001
15. Head of SLDC, TSECL, Agartala – 799 001
16. General Manager, Loktak HEP, NHPC Limited, Vidyut Vihar, Komkeirap, P.O. Loktak, Manipur – 795 124
17. GM (Comml), OTPC, 6th Floor, A Wing, IFCI Tower-61, Nehru Place, New Delhi-110019
18. Head of the Plant, OTPC, Palatana, Kakraban, Gomati District, Tripura - 799116
19. AGM (Comml), NTPC Limited, 16th Rupalim Path, Rukhmini Nagar, Guwahati-781022

निदेशक / Director/S.E (Comml)

North Eastern Regional Power Committee

MINUTES OF THE 32nd COMMERCIAL COORDINATION SUB-COMMITTEE MEETING OF NERPC

Date : 22/02/2017 (Wednesday)

Time : 10:00 hrs

Venue : Toshali Sands, Puri, Odisha

The 32nd CC Meeting was held on 22nd February 2017 at Puri, Odisha, under the aegis of NTPC Limited, ER-II Headquarters, Bhubaneswar. The List of Participants in the 32nd CC Meeting is attached at **Annexure – I.** The ppt. presentation by NERLDC on latest amendment/draft amendment of CERC regulations is attached at **Annexure-II.** In the inaugural and interactive session held on 21st February 2017 (Evening), all the delegates were felicitated with flower bouquets and rose sticks followed by lighting of ceremonial lamp by dignitaries namely, Shri P. K. Mishra (IES), Member Secretary & Chairman, Commercial Sub Committee, Shri Arvind Kumar, Regional Executive Director, NTPC and Shri B. Lyngkhoi (IES), Director/SE(C), NERPC respectively. In his welcome address, Shri Arvind Kumar, RED, NTPC highlighted in brief, the achievement and future plans of NTPC Limited. He mentioned that NTPC has come up with plans for capacity addition through renewable resources viz, solar, small hydro & wind power etc. There were exchange of views and sharing of ideas on commercial issues pertaining to NER by senior officers of the CC forum during the interactive session.

The discussion of agenda of 32nd CC meeting commenced with opening remarks by Shri P. K. Mishra, Member Secretary, NERPC. While welcoming all the participants in the meeting, Shri Mishra informed that NERPC would implement all developmental programs for the benefit of North Eastern Region and highlighted the status of CDAC project for NER. He informed that CDAC training program would soon be organized to be participated by all the utilities in the region. He also mentioned that NERPC appreciates the sentiment of both states and PSUs and it is the endeavor of NERPC to take appropriate action through consensus for the overall benefit of the region.

Shri B. Lyngkhoi, Director/SE (C), NERPC stated that power plants such as Bongaigaon, Palatana, Subansiri etc have been constructed by the central government for the NER beneficiaries and after the commissioning of Palatana and Bongaigaon thermal plants, the availability of power in NER has increased significantly. He, however, stated at the same time, that the high cost of power of Bongaigaon is a

concern and therefore, the central government is to take corrective action for providing affordable power to the beneficiaries which will ultimately benefit the consumers in the North Eastern States. He further informed that NERPC has already taken up the issue of high cost of NTPC Bongaigaon power with the Ministry of Power.

Shri S. M. Aimol, Dy. Director/EE (Comml), on behalf of NERPC Secretariat, expressed deep sense of gratitude to Shri Arvind Kumar, Regional ED, NTPC for his invaluable guidance, support and keen interest towards hosting of the 32nd CCM. He conveyed his sincere thanks to Shri P. R. Jena, AGM (Comml), NTPC and the entire team of NTPC for their warm hospitality, kind gestures and generosity accorded to all members of the delegates. He also expressed heartfelt gratitude to all participants for their active involvement and cooperation without which the meeting would not have been possible.

Shri Pravat R Jena, AGM (Comml), NTPC also expressed his sincere gratitude to NERPC Secretariat for giving them the opportunity to host the 32nd CCM in Odisha. He thanked all the distinguished delegates for their participation and making the meeting a success. He especially mentioned the presence of Shri T. S Singh, GM, NERLDC & Shri R. Sutradhar, DGM, NERLDC who could not reach the venue for the inaugural session on 21st February 2017 (evening) and thanked them for their timely presence for discussion of agenda in the 32nd CC meeting.

Thereafter, Member Secretary requested Shri B. Lyngkhoi, Director/SE (Comml) to take up the agenda items for discussion.

C O N F I R M A T I O N O F M I N U T E S

CONFIRMATION OF MINUTES OF THE 31TH COMMERCIAL SUB-COMMITTEE MEETING OF NERPC.

Director/SE (C) informed that the minutes of the 31st CC Meeting held at Hotel "Radisson Blu Plaza, Mahipalpur", Delhi on the 6th December 2016 was circulated vide No.: NERPC/COM/CC_Min/2016/3340-3379 dated 27th December 2016 and corrigendum to the minutes vide NERPC/COM/CC_Min/2016/3766-3812 dated 13th January 2017.

Since no comments/observations were received from the constituents, the sub-committee confirmed the minutes of 31st CCM of NERPC.

The Sub-committee noted as above.

A G E N D A I T E M S

2. AGENDA ITEMS FROM NERPC:

2.1 *Certification of open cycle generation of AGBPP:*

As per methodology decided in the 87th OCC meeting and the modus operandi decided in the 19th & 20th CCM, the open cycle generation of AGBPP for FY 2015-16 has been prepared by NERPC based on (generation) data verified by NERLDC which is to be ratified by CC members. The calculation is attached at **Annexure 2.1**.

Deliberation of the Sub-Committee

Director/SE (C), NERPC informed that the same has been ratified in the last OCC (129th OCC) meeting held on 17.02.2017 and it is now being put up to commercial committee also for ratification.

The commercial sub-committee ratified the open cycle generation of AGBPP for FY 2015-16.

The Sub-committee noted as above.
Action: NEEPCO

2.2 *Board Fund Contribution for FY 2016-17 onwards:*

As per decision of the 17th TCC/RPC meeting, annual contribution towards board fund of NERPC has been increased from Rs 50,000/- to Rs 1, 00,000/- for states and from Rs 2, 00, 000/- to Rs 4, 00,000/- for CPSUs w.e.f FY 2016-17.

Accordingly, NERPC has requested all concerned constituents to kindly deposit the enhanced amount into the account of Member Secretary NERPC maintained in Axis bank vide our letter Ref. No. NERPC/SE (O)/Committee/Board Fund/2015 dt. 11th January 2017.

The status of payment received as on 13.02.2017 for FY 2016-17 is as follows:

States:

Sl. No.	Utilities	Regular amount of Rs 50,000/-	Enhanced amount of Rs 50,000/-	**Final amount to be paid before 31/3/2017**
1	Ar. Pradesh	***Due***	***Due***	1,00,000/-
2	APDCL	Received	Received	NIL
3	MSPDCL	***Due***	***Due***	1,00,000/-
4	MeECL	Received	Received	NIL
5	Mizoram	Received	***Due***	50,000/-
6	Nagaland	Received	***Due***	50,000/-
7	TSECL	Received	***Due***	50,000/-

CPSUs:

Sl. No.	Utilities	Regular amount of Rs 2,00,000/-	Enhanced amount of Rs 2,00,000/-	**Final amount to be paid before 31/3/2017**
1	NEEPCO	Received	Received	NIL
2	NHPC	Received	***Due***	2,00,000/-
3	NTPC	Received	***Due***	2,00,000/-
4	NVVN	Received	***Due***	2,00,000/-
5	OTPC	Received	Received	NIL
6	PGCIL	Received	Received	NIL
7	PTC	Received	Received	NIL

Concerned constituents/utilities are requested to make the payment as per amount mentioned in the last column of the table above within current FY 2016-17.

Deliberation of the Sub-Committee

Director/SE (C) requested all concerned to deposit their respective amount as soon as possible. He also mentioned that fund for design & development of Android Mobile App has been approved during 17th TCC/NERPC meeting and the amount approved is Rs 8 Lakhs each for CPSUs and Rs. 1.1 Lakhs each for NER States. He stated that communication, in this regard, has been sent to all constituents vide NERPC/SE(O)/Committee/Board Fund/2015/3751-3764 dt. 13/01/2017 and further requested all concerned to contribute this amount also at the earliest.

Dy. Director/EE (C), NERPC informed that as on 13/02/2017, NERTS/POWERGRID, OTPC and NEEPCO have paid their respective amount of Rs 8 lakhs each towards design and development of Android mobile App.

All the concerned utilities present in the meeting informed that they would pay their respective amount for Annual Board Fund as well as Android Mobile App immediately.

The Sub-committee noted as above.
Action: All above concern utilities.

2.3 *Tabulation of revenue earned through regulation of power to beneficiary states of NER:*

Concerned utilities are to submit the required information in the format given below.

Financial Year : e.g. 2015 - 2016								
Regulating Entity: **Regulated Entity:**	**Generating station from where regulation is done**	**Quantum of regulated power (in MWH)**	**Mode of sale of regulated power (through exchange or through traders or DSM etc)**	**Total revenue earned from sale of regulated power (In Rs.)**	**Detail of expenditure incurred towards (a) adjustment of energy charges (b) registration fee for exchanges or traders' fee etc (c) Any other incidental expenses with detail (In Rs.)**			**Amount of outstanding dues of the Regulated Entity. (In Rs.)**	**Amount adjusted against the outstanding dues of the Regulated Entity (In Rs.)**	**Remaining amount, if any, to be passed on to the Regulated Entity (In Rs.)**
(1)	(2)	(3)	(4)	(5)	(6)			(7)	(8)	(9)=(5)-(6)-(8)
					(a)	(b)	(c)			

NOTE: If (9) is negative, then it indicates that outstanding due has not been recovered fully.

NEEPCO was regulating Power to MeECL till 22/12/2016. NEEPCO is required to furnish details as above.

Deliberation of the Sub-Committee

Dy. Director/EE (C), NERPC informed that NEEPCO has submitted the required data as above (up to 22.12.2016) and the same has been found to be in order. (Attached at **Annexure-2.3**)

The Sub-committee noted as above. No further action required.

3. AGENDA ITEMS FROM NHPC

3.1 *Signing of PPA:*

(i) Signing of Power Purchase Agreement (PPA) in respect of Tawang HE Project, Stage - I & II :-

Signing of PPA in respect of Tawang HE Project, Stage – I & II is pending with **Tripura, & Manipur**. The matter was discussed in 31st CCM of NERPC and it was informed by the representative of TSECL & MSPDCL that matter has been put to their State Governments & reply of State Governments is awaited. In this regard, NHPC has also requested, Secretary (Power), Govt. of Tripura, Power Department and Chief Engineer,

Electricity Department, Govt. of Manipur vide letter dated 06.01.2017 to give their concurrence at the earliest so that formal agreement could be signed.

In view of above, TSECL, Tripura and MSPDCL, Manipur are requested to pursue with their State Governments & after getting consent from your State Governments, intimate date & venue for it's signing.

Deliberation of the Sub-Committee

GM (Comml), NHPC informed the forum of Tripura's decision not to sign the PPA of Tawang-I & II. He informed the house that NHPC will now intimate the decision of Tripura to the Ministry of Power for further necessary action.

Representative of Manipur informed that the matter has been put up for the consideration of the state government and after the assembly election in March 2017; they will be able to pursue further with the government and revert back to the commercial committee forum.

Action: NHPC & Manipur.

(ii) Signing of Power Purchase Agreement (PPA) in respect of Subansiri Lower HE Project (2000 MW) in Arunachal Pradesh :-

Signing of PPA with Deptt. of Power, Govt. of Arunachal Pradesh in respect of Subansiri Lower HE Project (2000 MW) in Arunachal Pradesh is pending since long. Modification sought by Arunachal Pradesh has already been agreed & conveyed vide our letter dated 10.11.2016. Further, queries of Arunachal Pradesh is suitably addressed & sent vide ED (Itanagar), NHPC's letter dated 23.01.2017.

In view of above, Deptt. of Power, Govt. of Arunachal Pradesh may please be requested to give their consent at the earliest. PPA of Tawang - I & II will also be signed on similar lines.

Deliberation of the Sub-Committee

Member Secretary, NERPC raised serious concern about the frequent absence of some beneficiary states in the commercial committee meeting due to which the agenda points pertaining to them could not be discussed. He informed the forum that a commercial committee meeting will be held in Ar. Pradesh on a suitable date and Ar. Pradesh would be requested at the highest level to nominate a responsible and suitable officer for attending commercial committee meetings.

Director/SE (C), NERPC requested all utilities having issues with Ar. Pradesh to highlight the matters, in the proposed commercial committee meeting to be held in the near future, in the presence of senior officers of Ar. Pradesh government.

The Sub-committee noted as above.

Action: NHPC, all concerned utilities & Ar. Pradesh

3.2 ***Outstanding dues of NHPC for more than 60 days:***

(i) MeECL, Meghalaya: - In response to our various letters & efforts, CAO, MeECL, Meghalaya intimated vide their letter dated 09.01.2017 that more time is required to clear the outstanding dues. Keeping in view of above, NHPC has considered the problem of Meghalaya & requested vide our letter dated 25.01.2017 to clear the entire outstanding dues of NHPC in installments by August/September, 2017.

As on date, an amount of **Rs 31.85 Crs** (Including surcharge of **Rs 10.27 Crs** up to 31.12.2016) is payable by MeECL, Meghalaya**.**

In view of above, MeECL/MePDCL, Meghalaya is requested to submit the liquidation plan & start making payment of principal outstanding amount in installment immediately so that entire dues are cleared by August/September, 2017.

Deliberation of the Sub-Committee

Director/ SE (C), NERPC stated that the huge outstanding dues against some beneficiary states have been a concern and many times the issue has been discussed in this forum. It is to be appreciated that generators in NER have been considerate towards their beneficiary states and do not readily resort to power regulation unless extremely necessitated. He impressed upon the house and the beneficiaries in particular that they need to be more reasonable and take action for liquidation of outstanding dues considering the fact that utilities need regular cash flow to remain commercially viable and this is true in case of NEEPCO, NHPC, PGCIL etc. He informed the CC forum that he would personally meet the senior officials of MeECL and discuss the issue of outstanding dues and LC matters against MeECL of all PSUs including NHPC.

The Sub-committee noted as above.

Action: Meghalaya & all concern utilities

(ii) MSPDCL, Manipur: - An amount of **Rs 7.69 Crores** (including surcharge of **Rs 0.28 Crores** up to 31.12.2016) is outstanding for more than 60 days. During 31st CCM of NERPC, representative of MSPDCL informed that outstanding dues of more than 60 days will be cleared by December, 2016. Although, MSPDCL has released ₹11.47/- Crores during January, 2017 but outstanding dues of more than 60 days amounting to ₹7.69 Crores are still pending.

So, MSPDCL, Manipur is requested to clear their outstanding dues of more than 60 days as early as possible.

Deliberation of the Sub-Committee

Representative of MSPDCL informed that they will try to clear all 60 days dues by March 2017.

The Sub-committee noted as above.

Action: MSPDCL

3.3 ***Opening/maintaining of Letter of Credit (LC):***

In spite of regular follow up, Arunachal Pradesh & Manipur has not provided LC of requisite amount till now. The matter was also discussed in 31st CCM of NERPC & it was assured by MSPDCL that LC will be opened by December, 2016. Now, we have calculated new LC amount for the FY 2017-18 which is equal to 105% of average billing of preceding 12 months (i.e. bills raised from January to December) and intimated Manipur & Arunachal Pradesh vide our letter dated 12.01.2017. Details of LC's are as under:-

Name of beneficiary	Requisite amount	Validity already expired on
Arunachal Pradesh	Rs 0.84 Crs	31.03.2016
Manipur	Rs 5.23 Crs	15.09.2016

Deptt. of Power, Govt. of Arunachal Pradesh & MSPDCL, Manipur are requested to furnish the "Letter of Credit (LC)" of requisite amount immediately with validity up to 31.03.2018 on top priority. All other beneficiaries are also requested to open the LC of requisite amount up to the period 31.03.2018.

Deliberation of the Sub-Committee

The following status/action taken was reported:

Sl. No.	Beneficiaries	Status/Action taken
1	Manipur	LC of requisite amount will be put in place by March 2017.

2	Ar. Pradesh	As discussed in item no. 3.1(ii) above.

The Sub-committee noted as above.

Action: Manipur, Ar. Pradesh & NHPC

4. AGENDA ITEMS FROM OTPC:

4.1 *Construction of 132 kV line Bay at Palatana Generating Switchyard:*

In the 5th Standing Committee Meeting (SCM) on Power System Planning for North Eastern Region (NER) held at Imphal, Manipur, it was informed that Government of India (GOI) has decided to transmit power to Bangladesh through 400 kV Surajmaninagar-North Comila D/C line and for effecting this termination of second circuit of Palatana-Surajmani Nagar line at Palatana 132 kV switchyard would be required. This necessitated creation of an additional 132 kV bay at Palatana generating switchyard.

OTPC had thereby explored the options for starting the work on this bay but no contractor was ready to take up the work due to its contract value.

A meeting was then held in office of Director (Transmission), Ministry of Power (GOI) wherein it was informed that power supply from India to Bangladesh may take place by December 2016 and for reliable power transfer from India to Bangladesh, both circuits of Palatana-Surajmaninagar should be in operation. OTPC was therefore advised to readily start the work on completing this additional 132 kV bay at Palatana switchyard and may assign the work to PGCIL for expeditious completion.

OTPC had hence discussed the work with PGCIL which then submitted a tentative timeline of 30 months for completion of this work at an expected cost estimate of Rs 10 Crores.

While the work required to be taken up and completed at the earliest, PGCIL had submitted a large estimate with stretched timeline of 30 months. OTPC had therefore discussed the case with M/s Alstom who had done the installation work of the 2nd Inter-Connecting Transformer (ICT) for OTPC. M/s Alstom has submitted a tentative timeline of 10 (Ten) Months for completion of the 132 kV bay with an expected cost estimate of Rs 5.72 Crores.

It is requested to all the members of the Committee to approve the estimated cost of Rs 5.72 Crores for construction of 132 kV line bay at Palatana generating switchyard so that OTPC may take up the matter with CERC for capitalization.

Deliberation of the Sub-Committee

APDCL representative stated that the additional bay is necessitated for reliable transfer of power to Bangladesh and since it is for regional as well as national interest, instead of further burdening the beneficiaries, the expenditure may be funded from PSDF.

NERLDC representative was of the view that the provision of additional bay at Palatana switchyard is not only for power supply to Bangladesh but it is a part of evacuation of power of Palatana Plant.

CE (PSPA), CEA was consulted over phone during the meeting and he clarified that the project is to be taken up by Powergrid which could be billed under PoC mechanism.

The subcommittee, after in-depth discussion, finally decided that the proposed work will be executed by POWERGRID and the expenditure will be as per PoC mechanism.

Action: OTPC & PGCIL

4.2 *Outstanding Dues of OTPC against NER beneficiaries:*

The current total outstanding dues of OTPC against the NER beneficiary states (as on 06-02-2017) are as under:

(Amount in Rs Crores)

Sl.No.	Beneficiary	Outstanding Dues (>60 Days)	Total Outstanding
1	Arunachal Pradesh	0	2.07
2	Assam	38.81	62.26
3	Manipur	11.90	16.07
4	Meghalaya	25.88	33.53
5	Mizoram	9.33	11.46
6	Nagaland	0.15	0.15
7	Tripura	65.73	84.57
	Total	**151.8**	**210.11**

The total outstanding dues as on 06-02-2017 are Rs 210.11 Crores out of which outstanding beyond 60 days is Rs 151.8 Crores. Constituents are requested to clear at least the outstanding dues over 60 days, at the earliest.

Deliberation of the Sub-Committee

The following status/action to be taken was reported:

Sl. No.	Beneficiaries	Status/Action to be taken
1	Assam	APDCL will clear the outstanding amount by March 2017.
2	Meghalaya	As discussed in item no. 3.2 (i) above.

3	Tripura	Tripura agreed to pay by March 2017.
4.	Manipur	MSPDCL will clear dues greater than 60 days by March 2017.

All concerned beneficiaries were requested to liquidate their outstanding dues at the earliest.

4.3 ***Status of Payment Security Mechanism of the beneficiaries required against monthly energy billing as per Power Purchase Agreement and CERC regulations:***

Sl. No.	Beneficiary	Letter of Credit (LC) required as per PPA (Rs Crore)	LC amount status (Rs Crore)	Valid Upto	Remarks
1	Arunachal Pradesh	11.62	11.62	31-Mar-2016	Kindly renew the LC and park sufficient funds with bank for LC
2	Assam	40	40	27-Apr-2017	LC is in place
3	Manipur	15.02	3.7	15-Sept-2016	Kindly renew the LC
4	Meghalaya	29.78	-	-	Meghalaya has never provided the LC even after continuous persuasion
5	Mizoram	7.5	7.5	6-May-2017	LC is in place
6	Nagaland	14.26	14.26	20-Mar-2017	LC is in place
7	Tripura	46.53	18	19-Mar-2017	LC is in place

Beneficiaries are requested to enhance and renew the LC amount as per the PPA at the earliest.

Deliberation of the Sub-Committee

All concerned beneficiaries were reminded to renew/enhance LC at the earliest as per PPA and CERC regulations.

Action: All above concerned beneficiaries

5. AGENDA ITEMS FROM NERTS/POWERGRID:

5.1 *Outstanding dues:*

The total outstanding of POWERGID's NER beneficiaries as on 06.02.17 is as under-

All Figures in INR Crores

DIC	Total Outstanding	Outstanding more than 60 days	Average billing	Remarks
Ar. Pradesh	5.44	0.00	3.15	-
AEGCL (Assam)	135.42	44.09	38.00	**3 months receivables**

Manipur	15.44	7.29	3.90	**04 months receivables**
MeECL (Meghalaya)	39.85	19.54	8.00	**05 months receivables**
Mizoram	17.71	9.20	3.80	**5 months receivables**
Nagaland	4.31	0.00	4.50	**-**
TSECL (Tripura)	3.23	0.00	3.30	**-**
Total	221.39	80.13	64.65	**04 months receivables**

AEGCL (Assam), MSPDCL (Manipur), MeECL (Meghalaya) & Mizoram may be impressed upon to liquidate their respective outstanding dues immediately.

Deliberation of the Sub-Committee

Assam and Manipur agreed to clear some amount against POWERGRID's dues by March 2017.

All other concerned beneficiaries were also requested to liquidate their dues regularly.

The Sub-committee noted as above.

Action: All above concerned beneficiaries.

5.2 ***LC requirement against PoC billing as per Cl. No. 3.6 of BCD (Billing Collection and Disbursement) Procedures of CERC order no. L-1/44/2010-CERC, Dtd. 29.04.11:***

REQUIREMENT AND STATUS OF LC AS ON DATE (06.02.17) OF NER BENEFICIARIES

(All Figures in Rs Lakh)

Sl	Beneficiary	Required LC Amount	Due date of enhancement and renewal (for one year)	Total LC Amount to be renewed including enhanced value		
				Existing	Enhancement	Total
1	Arunachal Pradesh	244.96	***31.03.16***	252.00	0.00	244.96
2	AEGCL (Assam)	3217.89	31.05.17	3217.89	0.00	3217.89
3	Manipur	280.15	***15.09.16***	213.13	**67.05**	236.79
4	MeECL	699.72	**04.10.17**	150.00	**549.72**	699.72
5	Mizoram	269.59	04.05.17	269.59	0.00	269.59
6	Nagaland	284.04	21.03.17	284.04	0.00	284.04
7	Tripura	271.56	*14.02.17*	183.00	88.56	271.56

- DICs are requested to renew & enhanced the LC as per requirement.

- **MeECL may be impressed upon to enhance LC of requisite amount immediately**.

. Arunachal Pradesh & Manipur may be impressed to renew / enhance the LC as per requirement.

Deliberation of the Sub-Committee

All concerned DICs were requested to renew/enhance the LC of requisite amount as per CERC regulations.

The Sub-committee noted as above.

Action: All concerned DICs as above.

6. AGENDA ITEMS FROM NTPC

6.1 ***Outstanding more than 60 days as on 01.02.2017 is Rs 231.49 Crore. Tripura is not paying the energy bill for the energy supplied since April 2016:***

Sl. No.	Beneficiaries	Total Outstanding (in Cr.)	Outstanding more than 60 days
1	APDCL, Assam	292.81	134.52
2	DoP, Ar. Pradesh	5.51	--
3	P&ED, Mizoram	16.31	5.37
4	Deptt. of Power, Manipur	8.72	3.25
5	MeECL, Meghalaya	76.72	59.15
6	TSECL, Tripura	34.75	29.20
	Total	**434.82**	**231.49**

Deliberation of the Sub-Committee

APDCL informed that they will clear some outstanding amount very soon. All other beneficiaries above were also requested to liquidate their dues at the earliest.

The Sub-committee noted as above.

Action: All beneficiaries above.

6.2 Following beneficiaries have not opened the LC of required amounts.

Sl. No	Beneficiaries	LC Required As per PPA (Cr.)	Remarks
1	MeECL, Meghalaya	9.36	Not yet opened
2	DoP, Ar. Pradesh	5.36	Not yet opened
3	MSPDCL, Manipur	5.86	Not yet opened
4	TSECL, Tripura	5.95	Not agreeing to open.

Deliberation of the Sub-Committee

All beneficiaries above were requested to take immediate action for opening of required amount of LC.

Action: All beneficiaries above.

6.3 Ministry of Power has approved the TPA on 22.12.2016. Manipur, Meghalaya, Mizoram & Nagaland have signed the TPA. Other states are requested to sign the same.

Deliberation of the Sub-Committee

AGM (Comml), NTPC informed that all beneficiaries except Tripura have agreed to sign the TPA. Tripura representative stated that Govt of Tripura has not been responsive on the signing of TPA.

The subcommittee decided that NERPC forum will visit Agartala for discussion with senior officials of Govt of Tripura on the issue.

Action: NERPC

7. AGENDA ITEMS FROM NERLDC:

7.1 *Deviation charges outstanding:*

Status of Deviation charges outstanding as on 07/02/2017 is attached (**Annexure-7.1**)**.** From the same it can be seen that Assam **(Rs 46.29** Crores ; greater than 13 weeks **Rs 25.57** Crores), Arunachal Pradesh **(Rs 7.92** Crores ; greater than 13 weeks **Rs 2.06** Crores) & Meghalaya **(Rs 4.69** Crores ; greater than 13 weeks **Rs 3.37** Crores) are major defaulters.

It is reiterated that outstanding >13 weeks may result in action as stipulated by CERC by not allowing open access.

Assam, Arunachal Pradesh and Meghalaya are required to take immediate necessary action.

Deliberation of the Sub-Committee

NERLDC representative stated that as per CERC regulations outstanding at anytime should not be beyond 13 weeks. He impressed upon all concerned beneficiaries to clear their outstanding dues on priority basis so as to avoid curtailment of open access as stipulated by CERC.

All the beneficiaries present agreed to clear their respective dues at the earliest.

Action: All concerned beneficiaries.

7.2 *Reactive Charges Outstanding:*

Status of Reactive charges outstanding as on 06/02/2017 is attached (**Annexure-7.2**). From the same it can be seen that Arunachal Pradesh - ₹ 21.70 Lakhs, Manipur - ₹ 66.66 Lakhs and Mizoram - ₹ 8.82 Lakhs are major defaulters.

Arunachal Pradesh, Manipur & Mizoram are required to take immediate necessary action.

Deliberation of the Sub-Committee

All concerned beneficiaries were requested to clear their respective reactive charges outstanding dues as soon as possible.

Action: All concerned beneficiaries.

7.3 *Opening of LC against Deviation Charges Liability*:

As per DSM charges and related matters Regulations, 2014 of CERC, following are the LC amounts pertaining to NER entities mentioned below:-

Constituents	LC Amount (in Lakhs)
Ar. Pradesh	95.81
Assam	562.00
Manipur	42.13
Tripura	190.00
Mizoram	58.43

Till date only Nagaland has opened LC.

It is requested to open LC to adhere to CERC stipulation.

Deliberation of the Sub-Committee

All concerned beneficiaries were requested to open LC of requisite amount as per CERC regulations.

Action: All concerned beneficiaries.

7.4 *Bank Account details of Arunachal Pradesh*

As per clause 10 (3) of CERC DSM Regulations, 2014, "*All payments to the entities entitled to receive any amount on account of charges for Deviation shall be made within 2 working days of receipt of the payments in the "Regional Deviation Pool Account Fund" of the concerned region*".

Accordingly payment is made by NERLDC to receiving entities through RTGS/online transfer. But, in case of Ar. Pradesh, payment is released through account payee Demand Draft (DD), as bank account details have not been furnished in spite of no. of correspondences.

Ar. Pradesh is requested to furnish bank account details at the earliest.

Deliberation of the Sub-Committee

As discussed in item no. **3 (ii)** above.

7.5 *Meter issues:*

AMR Scheme in NER: - Scheme has already been delayed. Needs to be expedited. POWERGRID may intimate the target date for floating NIT.

Deliberation of the Sub-Committee

AGM (Comml), NERTS, POWERGRID intimated that the matter was being expedited and further stated that fresh cost estimates are being obtained from three firms. He informed that the latest status has been intimated in the 24th Metering meeting. The following is the status as reported by NERTS recorded in the minutes of the 24th metering Meeting:

The following three parties were again contacted for early submission of offer. All of the three parties have expressed that they are working on it and would submit offer within one week time from now:

a) M/s TCS Ltd., Kolkata

b) M/s Kalkitech

c) M/s Valiant Communications

So far offer has been received from M/s Valiant communications only who have quoted an amount of Rs.4.38 Crore.

The other two parties would submit their offer within 2/3 days time.

Accordingly NERTS would proceed for cost estimation and QR (Qualifying requirement) approval for tendering.

The Commercial Sub-committee noted as above

Action: NERTS/POWERGRID

7.6 *Signing of Reconciliation Statement:*

Status of signing of Reconciliation statement of DSM, Reactive, RRAS and Fees & Charges were circulated in the meeting.

All constituents are requested to sign all reconciliation statements.

Deliberation of the Sub-Committee

All the constituents were reminded to sign the reconciliation statements which are being sent regularly by NERLDC and send it back to NERLDC on timely basis.

The Sub-committee noted as above.

Action: All constituents.

7.7 Tabling quarterly figures of Deviation and Reactive Pool Account in Commercial Committee:

The quarterly figures for October 2016 to December 2016 were circulated to the constituents in the meeting. Observations, if any may be sent within 15 days to NERLDC. If no observation is received the accounts as circulated will be taken as final.

The Sub-committee noted as above.

Action: All concerned constituents

8. AGENDA FROM APDCL

8.1 ***Re-import of Kurichhu energy by Bhutan from Assam grid:***

This issue is in the matter of re-import of Kurichhu energy by Bhutan through Assam grid. On the basis of the CERC order dated 30.06.2016 in APDCL Petition No. 239/MP/2015 APDCL raised energy charge bill @ average UI/ DSM rate up to November' 2014.

However beyond November' 2014, APDCL could not raise bill because the respective DSM rate found to be very low even most of the times it is zero. Since the DSM rate does not fetch the cost of generation, APDCL requested ERPC to arrange a special meeting to evolve an amicable arrangement for billing by APDCL. Of late ERPC has included this item in its 34TH Commercial Committee Meeting dated 06TH February, 2017 and accordingly we attended the said meeting and requested ERPC Forum for settlement of the issue by adopting any one of the following options:

(a) Ensuring reimbursement of the cost of supply of power to Bhutan from December' 2014 onwards either at the average cost of power purchase of APDCL at 33 KV level from the DSM pool account till the present arrangement continues.

(b) Else, APDCL be reimbursed with the energy quantum with necessary loss and 5% additional energy in line with system followed in present Banking arrangement of power.

(c) Or, take any other decision ensuring the equitable justice for both ends.

The ERPC Forum noted APDCL's submissions. Member Secretary, ERPC stated that earlier in the joint meeting of all stake holders, it was decided to bill @ monthly average UI/ DSM Rate; but during subsequent period with the improvement of frequency, the monthly DSM rate has gone down. He also enquired about the installation of ABT compliant Energy Meter at those substations. APDCL stated that those are unmanned

substations and therefore installation of ABT compliant Energy Meter may hardly serve the purpose. The MS, ERPC noted the absence of NERPC, NERLDC and even PTC who is the trading agent of Bhutan power. Therefore, the MS, ERPC proposed to hold a meeting with involvement of all stake holders on 06TH March, 2017.

This is for appraisal of the NERPC Forum and APDCL also requests NERPC and NERLDC to attend the next ERPC meeting dated 06TH March, 2017.

Deliberation of the Sub-Committee

Member Secretary NERPC informed that representative of NERPC Secretariat will attend the proposed meeting at ERPC Kolkata on 6th March 2017 to discuss the issue.

The Sub-committee noted as above.

Action: NERPC & APDCL

8.2 ***Decisions of 30TH Commercial Committee Meeting of NERPC relating to transaction of power in between Assam and Arunachal Pradesh (AP) requesting at 33 KV/ 11 KV level:***

Following the decisions taken in the 30TH CC meeting of NERPC on above subject, APDCL had sent two letters to the Chief Engineer (Power), Western Electrical Zone, AP requesting for bilateral arrangement of all these exchange of power at different points of 33 KV/ 11 KV level. But there is no positive response from AP side.

Recently APDCL has sent a letter on 31ST January, 2017 proposing disconnection of such transaction points with one month's time from the date of issue of the letter.

This is for kind information and necessary action of the NERPC Forum.

Deliberation of the Sub-Committee

After detail discussion, the forum advised APDCL to resolve the long standing issue bilaterally as already decided in the past CC meetings.

The Sub-committee noted as above.

Action: APDCL & Ar. Pradesh

8.3 ***Work done by Utilities during scheduled shut down of lines and Generators:***

It is seen that any scheduled shut down of either Generating Stations or Transmission lines are deliberated and approved in OCC meetings of NERPC. But details of work memo/works done actually are not appraised in subsequent OCC meetings. APDCL requests the Forum to include the agency wise work done details, particularly of central agencies in the following OCC meeting for appraisal of the Beneficiaries.

Deliberation of the Sub-Committee

Director/SE, NERPC stated that the matter may be raised in the OCC meeting and as suggested by Assam, Utilities availing shutdown may be asked to furnish the details of work done during the period of shutdown.

The subcommittee decided to refer the matter to OCC forum for implementation.

Action: APDCL/Assam

9. AGENDA FROM NEEPCO

9.1 ***Outstanding dues of beneficiaries' payable to NEEPCO as on 31.1.2017 are as follows:***

Beneficiary	Principal (In Rs. crore)	Surcharge accumulated till 30.09.2016 (in Rs. crore)	Total (in Rs. Crore)
APDCL, Assam	392.45	64.50	**456.95**
P&E Deptt., Mizoram	24.14	17.34	**41.49**
MSPDCL, Manipur	35.16	3.54	**38.69**
TSECL, Tripura	31.22	40.94	**72.15**
DoP, Ar. Pradesh	18.69	4.79	**23.48**
DoP, Nagaland	0	0	**0**
MePDCL, Meghalaya	54.46	273.59	**328.06**
Total	**556.12**	**404.70**	**960.82**

While many of the beneficiaries have cleared their old dues and are paying the current dues regularly, however the status of **MePDCL** and **APDCL** is alarming.

Due to accrual of such outstanding dues, NEEPCO is facing difficulty to meet its day to day expenditure including fuel cost required for operating its thermal power stations. In the interest of extending better service to its beneficiaries, NEEPCO earnestly requests all the beneficiaries to clear all the accumulated dues on priority and at the same time requests to make the payment against current bills on regular basis.

Deliberation of the Sub-Committee

APDCL representative informed that some payment will be made towards outstanding dues of NEEPCO by March 2017. MSPDCL representative also stated that Manipur will be able to pay their dues against NEEPCO by March 2017.

The other concerned beneficiaries were also requested to make regular payment against outstanding dues of NEEPCO so as to avoid huge accumulation of surcharge and alarming status of total outstanding dues.

Action: All concerned beneficiaries

9.2 *Signing of PPA for Kameng Hydro Electric Project (KaHEP)*

Kameng HEP (600 MW) is scheduled to be commissioned during 2017. Assam, Arunachal Pradesh & Nagaland have already signed the PPA; however, remaining NER states are yet to give their consent for signing of the same.

Draft PPAs along with salient features of the project including estimated cost, first year tariff, levellized tariff etc. were sent to all the beneficiaries of the project of NE region. The urgency of the matter was also discussed in the 29th CC meeting held on 22/06/2016 at Kohima as well as in the 17th TCC meeting held at Imphal.

Reminders on the matter were also sent to all the above mentioned beneficiaries of NE region. However, no response has yet been received from Meghalaya, Manipur, Tripura & Mizoram.

NER beneficiaries of the project, those who are yet to execute the PPA are requested to kindly expedite the execution of the PPAs in order to freeze the commercial aspects at the earliest to facilitate further subsequent action by NEEPCO.

The house may kindly deliberate on the matter.

Deliberation of the Sub-Committee

MSPDCL representative intimated that the proposal for signing of PPA for Kameng HEP is under consideration of Govt of Manipur. MSPDCL has been pursuing with the government and are awaiting the approval of the state government. He informed that MSPDCL will revert back to NEEPCO before the next CCM.

TSECL representative informed that the decision of the Govt of Tripura regarding signing of PPA for Kameng HEP has not been intimated yet to TSECL. He assured NEEPCO that they would further pursue and follow it up with the state government and revert back to NEEPCO before the next CCM.

The representatives of Mizoram and Meghalaya were not present and NEEPCO was asked to pursue with them further by visiting and discussing with their respective state governments.

Action: NEEPCO & all concerned beneficiaries

9.3 *Submission of payment release intimation by the beneficiaries:*

NEEPCO requires the information immediately from its beneficiaries regarding the payments released by them & bill references there-of for early updation of its accounts (payment adjustment against energy/surcharge bill). In addition, such details are required for allowing admissible rebate to the beneficiaries. The matter was discussed

in detail in earlier 2/3 CC meetings. But still most of the beneficiaries while making any payment do not give any intimation to NEEPCO.

NEEPCO earnestly requested to all NER beneficiaries to develop a mechanism from their end, so that payment release intimation can be forwarded immediately.

Considering the importance for immediate intimation on payment released and bill details as highlighted above, the matter is placed for deliberation seeking immediate action on the same.

Deliberation of the Sub-Committee

Sr. Manager (Comml), NEEPCO informed that due to the non intimation of payment details by the beneficiaries at the time of payment, they are facing difficulty in identifying the bills against which a particular payment is made by the beneficiaries.

He requested all beneficiaries to intimate the payment details so that proper booking could be made by NEEPCO against a particular payment viz, under surcharge or energy bills/monthly bills etc and accordingly benefits like rebate for timely payment could be given to the beneficiaries.

Action: All concerned beneficiaries

ANY OTHER ITEMS

Appreciation to Department of Power, Govt of Nagaland for their excellent record of payment towards bills of NER utilities:

All the generators along with CTU and NERLDC were pleased to place on record their appreciation to Department of Power, Government of Nagaland for maintaining an excellent record of payment towards various bills of utilities. The CC forum appreciated the effort of DoP, Nagaland towards timely payment of bills and also maintaining payment security mechanism in place as stipulated by CERC.

All other beneficiaries were requested to chalk up plans and consider ways and means to clear outstanding dues and avail rebate schemes for timely payment etc.

DATE AND VENUE OF THE NEXT COMMERCIAL COMMITTEE MEETING

The next Commercial Coordination Sub-Committee meeting will be held in the month of May 2017. The date and venue will be intimated separately.

The meeting ended with thanks to the Chair.

*****

Annexure-I

List of Participants in the 32nd CC Meetings held on 22nd February 2017

SN.	Name & Designation	Organization	Contact No.	Email Address
	No Representative	**Ar. Pradesh**	-	-
1.	Sh. A. K. Goswami GM, COM (T)	Assam	09864105893	ajanta_ggoswami@rediffmail.com
2.	Sh. H. M. Sharma GM (Com-Rev)	Assam	09810566869	hemantahemanta@rediffmail.com
3.	Sh. K. Goswami DGM (Com-T)	Assam	09864020019	kumud_goswami@rediffmail.com
4.	Sh. Suresh Kaimal AGM (F&A)	Assam	09435114641	suresh11_k@rediffmail.com
5.	Sh. Dipesh Ch. Das AGM (LD-Com)	Assam	09954110254	dipeshdas21@gmail.com
6.	Sh. Th. Aton Singh GM (Comml/Plg)	Manipur	09612152948	aton.sekmai@gmail.com
7.	Sh. H. Shantikumar Singh, GM(SLDC)	Manipur	09436022381	gmsldcmanipur@gmail.com
8.	Sh. Th.Satyajeet Singh, AM, MSPDCL	Manipur	08415945818	thokchomsatyajeet@mspdcl.com
	No Representative	**Meghalaya**	-	-
	No Representative	**Mizoram**	-	-
	No Representative	**Nagaland**	-	-
9.	Sh. Debabrata Pal Sr. Manager	Tripura	09436500244	ad_comm@rediffmail.com
10.	Sh. M. Choudhury Sr. Mgr (Comml)	NEEPCO	09435339777	munin99@gmail.com
11.	Sh. T. S. Singh, GM	NERLDC	9436302717	-
12.	Sh. R.Sutradhar DGM (MO)	NERLDC	09436302714	rajibsutradhar1965@gmail.com
13.	Sh. Chander Mohan GM (Comml.)	NHPC	09818039339	ce2commercial@gmail.com
14.	Sh. K. Nayak Sr. Manager	NHPC	09599500478	ce2commercial@gmail.com
15.	Sh. R. K. Sood Addl GM (Comml)	NTPC	-	rsood@ntpc.co.in
16.	Sh. P. R. Jena Addl GM (Comml)	NTPC	09437964960	pravatrjena@ntpc.co.in
17.	Sh. G.C.Mohapatra AGM (comml.)	NTPC	09437049372	gcmohopatra@ntpc.co.in
18.	S. Tripathy DGM (Comml.)	NTPC	09437001028	suraveetripathy@ntpc.co.in
19.	Sh. S. Haloi Sr. Mgr (comml.)	NTPC	09437561689	samirhaloi@ntpc.co.in
20.	Smt. S. Nayak, AM (C)	NTPC	09438233250	snayakntpc@gmail.com

21.	Sh. Arup Ch. Sarmah GM (Comml)	OTPC	9871839502	arup.sarmah@otpcindia.in
22.	Sh. Amit Dabas Mgr (Comml.)	OTPC	09810552777	amitdabas@otpcindia.in
23.	Sh. P. J. Sharma Addl. GM (Comml)	PGCIL	9435734294	nerts_comml@powergrid.co.in
24.	Sh. P. K. Mishra Member Secretary	NERPC	-	ms-nerpc@gov.in
25.	Sh. B. Lyngkhoi Director/S.E (C&O)	NERPC	9436163419	brieflee.lyngkhoi@gov.in
26.	Sh. S. M. Aimol Dy. Director/EE (C)	NERPC	8794002106	shialloa@yahoo.com
27.	Sh. S. Mukherjee, AEE	NERPC	8794277306	mukherjeesrijit2010@gmail.com

ANNEXURE-II

Presentation in 32nd. CCM of NERPC

22.02.2017

Amendment of IEGC 2010

draft 5th. Amendment

NERLDC, Shillong

Proposals in draft 5th. Amendment

- ***Spinning Reserves***
- ***FGMO/RGMO provisions***
- ***URS Sale in Market / two day ahead scheduling***

Amendments of IEGC 2010 (draft 5th. amend)

Definition of Spinning Reserve to be included in IEGC

CERC constituted "Committee on Spinning Reserve" under the Chairmanship of Shri A.S.Bakshi, Member, CERC for adoption of the Spinning Reserve Services in Indian Power system. Committee submitted its report on 17.09.2015 and has recommended that Spinning Reserve Services shall be in place by 01.04.2017.

Spinning Reserve in Indian Power System

Committee Report on Spinning Reserve : September 17, 2015
CERC order dated 13.10.2015 Petition No. 11/SM/2015

Maintenance of Load - Generation balance is one important aspect of reliability.

Number of uncertainties associated with Power System.

Increasing penetration of Renewables (both Wind and Solar) in the country

Creation of adequate system reserve margin and spinning reserve of 5% at national level has not yet materialized.

Amidst all these uncertainties, it is very important to have different **'Real Power Reserves'** in the Power System.

Committee Report on Spinning Reserve : September 17, 2015
CERC order dated 13.10.2015 Petition No. 11/SM/2015

The general response time of reserves

Reserve	Start	Full availability	End
Primary Control	Immediate	<30 sec	>15 min
Secondary Control	>30 Sec	<15 min	As long as required or till replaced by Tertiary Reserves
Tertiary Control	Usually > 15 min to Hours		

Committee Report on Spinning Reserve : September 17, 2015 CERC order dated 13.10.2015 Petition No. 11/SM/2015

Types of reserves

Primary control: Through turbine speed governors; Primary control is for providing immediate support to correct imbalance which lasts for short period of up to **30 seconds - 15 minutes**, within which secondary control should come into play so as to push generation of units providing primary control reserves back to their scheduled values.

Secondary control: Through Automatic Generation Control – AGC; Centralized area wise automatic control which delivers reserve power in order to bring back the frequency and the area interchange programs to their target values.

Units have to be wired under AGC (Automatic Generation Control) and both sides communication between control room and generators has to be provided. AGC (Automatic Generation Control) software is needed to implement and handle the calculations.

Committee Report on Spinning Reserve : September 17, 2015
CERC order dated 13.10.2015 Petition No. 11/SM/2015

Tertiary control: Manual change in the dispatching and unit commitment in order to restore the secondary control reserve ;

Tertiary control therefore, refers to rescheduling of generation to take care of deviations in a planned manner during real time operation and leads to restoration of primary control and secondary control reserve margins.

Committee Report on Spinning Reserve : September 17, 2015
CERC order dated 13.10.2015 Petition No. 11/SM/2015

What does Spinning Reserve mean?

"The spinning reserve means "the capacity which can be activated on decision of the system operator and which is provided by devices which are synchronized to the network and able to effect the change in active power."

Committee Report on Spinning Reserve : September 17, 2015
CERC order dated 13.10.2015 Petition No. 11/SM/2015

Regulatory provisions in India:

National Electricity Policy, 2005 envisages 5 % Spinning Reserves at national level.

Relevant extract from IEGC, from the section 5.2(i) is quoted as below:

*"**The recommended rate for changing the governor setting**, i.e., supplementary control for increasing or decreasing the output (generation level) for all generating units, irrespective of their type and size, **would be one (1.0) per cent per minute or as per manufacturer"s limits**. However, if frequency falls below 49.7Hz, all partly loaded generating units shall pick up additional load at a faster rate, according to their capability."*

Committee Report on Spinning Reserve : September 17, 2015
CERC order dated 13.10.2015 Petition No. 11/SM/2015

In terms of National Electricity policy, spinning reserves at **5% of the Installed Generation Capacity of around 272 GW works out as 13600 MW**. This would include primary control reserves, secondary control reserves and tertiary control spinning reserves.

The spinning Reserve may be maintained, to start with at the regional level.

Committee Report on Spinning Reserve : September 17, 2015 CERC order dated 13.10.2015 Petition No. 11/SM/2015

Primary reserves of 4000 MW would be maintained on an All India basis considering 4000 MW generation outage as a credible contingency. The same **would be provided by generating units in line with the IEGC provisions.**

Each region should maintain **Secondary reserve** corresponding to the largest unit size in the region.

1000 MW in Southern region;

800 MW in Western regions;

800 MW in Northern region;

660 MW in Eastern region and

363MW in North-eastern region. (total approx. **3600 MW on an All India basis**). **To start with it is felt that the spinning reserves may be carried on the ISGS regulated by CERC.**

Tertiary reserves should be maintained in a de-centralized fashion by each state control area for at least 50% of the largest generating unit available in the state control area.

Secondary Reserve Computation

Area Control Error (**ACE=△Ptie+k△f**).

Area Control Error (ACE) is the difference between scheduled and actual electrical generation within a **control area** on the power grid, taking frequency bias into account.

K is Frequency response of the area in MW/Hz.

Secondary Reserve Computation

Frequency Response Characteristics (FRC) is defined as the **automatic, sustained change in the power consumption by load or output of the generators that occurs immediately after a change in the control area's load-generation balance** and which is in a direction to oppose a change in interconnection's frequency.

Mathematically it is equivalent to

FRC = Change in Power (ΔP) / Change in Frequency (Δf)

Frequency Response Obligation (FRO) is defined as the minimum frequency response a control area has to provide in the event of any frequency deviation.

Secondary Reserve Computation

Area Control Error (**ACE=△Ptie+k△f**).

K is Frequency Response Obligation of the area in MW/Hz.

If NER is overdrawing from ER by 100 MW at 49.5 Hz,

ACE= 100 + 0.5 X 200 = 200 MW. (If FRO = 200 MW/Hz)

Secondary Reserve Computation

Region	FRC in MW/Hz	Maximum Value of ACE (in MW) for a typical day 6th May 2015
NR	1260	1281
WR	1700	704
SR	2250	746
ER	373	903
NER	86	392
Simultaneous sum (same time)	5669	2053

At least 2000 MW secondary control reserves are required.

ACE=ΔPtie+kΔf

Committee Report on Spinning Reserve : September 17, 2015
CERC order dated 13.10.2015 Petition No. 11/SM/2015

The respective RLDC shall be the Nodal agency at the regional level and NLDC at the country level.

The reserve requirement may be estimated by the nodal agency on day ahead basis along with day ahead scheduling of all available generating stations.

Implementation of AGC is necessary along with reliable telemetry and communication. **The AGC may be planned to be operationalised in the power system from 1.4.2017.**

It is essential that load forecasting is done at each discom level, at each SLDC/State level and each RLDC/Regional level and finally at NLDC/country level.

Committee Report on Spinning Reserve : September 17, 2015
CERC order dated 13.10.2015 Petition No. 11/SM/2015

The nodal agency may have the option of carrying such reserves on one or more plants on technical and commercial considerations and may withhold a part of declared capacity on such plants from scheduling. It could be in terms of % of declared capacity or in MW term as deemed fit.

To start with a regulated framework in line with the Ancillary Services Regulations may be evolved for identification and utilising of spinning reserves and implemented with effect from 1.4.2016. This framework may continue till 31.3.2017

Other proposals in draft 5th. Amendment

- ***FGMO/RGMO provisions***
- ***URS Sale in Market / two day ahead scheduling***

Amendments of IEGC 2010 (draft 5th. amend)

FGMO / RGMO provisions

Amend the Regulation 5.2 (f) and its sub-clauses for **excluding the generators below 25 MW from the list of hydro stations** which are required to provide the primary response through governor action

and for **including the Open Cycle Gas Turbine/Combined Cycle generating stations having gas turbines of capacity more than 50 MW each in the list of stations** which are required to provide the primary response through governor action.

RLDC/SLDC shall not schedule the units beyond ex bus generation corresponding to 100% of the installed capacity. Further, it has been opined by the Committee that Valve Wide Open (VWO) operation of units shall not be allowed so that there is margin available in valve opening for providing primary response upto 5% of the generation level.

Amendments of IEGC 2010 (draft 5th. amend)

Tariff Policy dated 28.1.2016

*"**Power stations are required to be available and ready to dispatch at all times**. Notwithstanding any provision contained in the Power Purchase Agreement (PPA), in order to ensure better utilization of un-requisitioned generating capacity of generating stations, based on regulated tariff under Section 62 of the Electricity Act 2003, **the procurer shall communicate, at least twenty four hours before 00.00 hours of the day when the power and quantum thereof is not requisitioned by it enabling the generating stations to sell the same in the market** in consonance with laid down policy of Central Government in this regard. The developer and the procurers signing the PPA would **share the gains realized from sale, if any, of such un-requisitioned power in market in the ratio of 50:50**, if not already provided in the PPA. **Such gain will be calculated as the difference between selling price of such power and fuel charge**. It should, however, be ensured that such merchant sale does not result in adverse impact on the original beneficiary(ies) including in the form of higher average energy charge vis-à-vis the energy charge payable without the merchant sale. For the projects under section 63 of the Act, the methodology for such sale may be decided by the Appropriate Commission on mutually agreed terms between procurer and generator or unless already specified in the PPA."*

Amendments of IEGC 2010 (draft 5th. amend)

Two day ahead scheduling summary

The scheduling is proposed to start at 1 PM on D-2 day if D is the day on which implemented schedules are applicable.

In case such power for which original beneficiary has allowed the generator to sell in the market has been sold in the market, beneficiary shall not be allowed to recall the power by rescheduling. In case power left unsold on the market, original beneficiaries may schedule the power from 4th time block as per procedure in vogue.

Amendments of IEGC 2010 (draft 5th. amend)

*By **1 PM** every day, the ISGS shall advise the concerned RLDC, the station-wise ex-power plant MW and MWh capabilities foreseen for the day after the next day, i.e., from 0000 hrs to 2400 hrs of the day after the next day*

*The foreseen capabilities of the ISGS and the corresponding MW and MWh entitlements of each State, shall be compiled by the RLDC every day for the day after the next day, and advised to all beneficiaries by **3 PM**.*

*SLDC shall advise the RLDC by **5 PM** their tentative drawal schedule for each of the ISGS in which they have Shares, long-term and medium-term bilateral interchanges, approved short -term bilateral interchanges.*

Amendments of IEGC 2010 (draft 5th. amend)

*By **7 PM** each day, the RLDC shall convey: The ex-power plant "despatch schedule" to each of the ISGS, in MW for different time block, for the day after the next day.*

*Original Beneficiaries of an ISGS will have first right to give requisition for the URS power of the ISGS. Such original beneficiaries shall advice RLDCs, through their SLDC, regarding quantum of power and time duration of such drawal out of declared URS of the ISGS, **by 8 P.M**. In case full URS of an ISGS is requisitioned by more than one original beneficiary, RLDC shall allocate URS proportionately based on the share of these original beneficiaries in the ISGS.*

*RLDCs to post the ISGS wise data of balance URS on its website by **9 P.M**.*

Amendments of IEGC 2010 (draft 5th. amend)

*The original beneficiary shall communicate by **12PM** about the quantum and duration of such URS power to ISGS to enable ISGS sell same in the market . If the original beneficiary fails to communicate to ISGS, then the ISGS shall be entitled to sell the URS power of the beneficiary in the market .*

The URS which has been sold and scheduled by ISGS in the market (power exchange or through STOA) cannot be called back by the original beneficiary.

After sale in market as under 8(d) above, if any power still remains under URS, the same may be requisitioned by the beneficiaries of the station.

By 6 P.M, each day, RLDC shall convey ex-power power plant dispatch to each ISGS for the next day after incorporating sale in market.

Amendments of IEGC 2010 (draft 5th. amend)

In case of sale of un-requisitioned surplus power in market , the generator and the original beneficiary would share the realized gains in the ratio of 50:50.

Subject to provisions to CERC Tariff Regulations, the liability of fixed charge in such case shall remain with original beneficiary.

In case the un-requisitioned surplus power surrendered by the original beneficiary is requisitioned by the other beneficiaries of the ISGS, it shall be treated as reallocation and the fixed charge and variable charge for such energy exchanged shall be borne by the other beneficiary(ies).

CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Notification

Dated the 17th Feburary 2016

No.–L-1/(3)/2009-CERC: In exercise of the powers conferred under section 178 of the Electricity Act, 2003 and all other powers enabling in this behalf, and after previous publication, the Central Electricity Regulatory Commission hereby makes the following regulations to amend Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters Open Access in inter-State Transmission) Regulations, 2009, as amended from time to time (hereinafter referred to as "the Principal Regulations"), namely:-

1. Short Title and Commencement

(1) These regulations may be called the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) (Sixth Amendment) Regulations, 2017

(2) These regulations shall come into force from the date of their publications notification in the Gazette of India.

2. Amendment to Regulation 2 of the Principal Regulations:

(1) Sub-clause (l) of clause (1) of Regulation 2 of the Principal Regulations shall be substituted as under:

"(l) **"long-term Access"** means the right to use the inter-State Transmission system for a period exceeding 7 years;"

(2) Sub Clause (o) of clause (1) of Regulation 2 of the Principal Regulations shall be substituted as under:

"(o) **Medium-Term Open Access** means the right to use the inter-State Transmission system for a period equal to or exceeding 3 months but not exceeding 5 years;"

3. **Amendment of Regulation 8 of Principal Regulations:** Clause (8) of Regulation 8 of the Principal Regulations shall be substituted as under:

"(8) The dedicated transmission line from generating station of the generating company to the pooling station of the transmission licensee (including deemed transmission licensee) shall be developed, owned and operated by the applicant generating Company. The specifications for dedicated transmission lines may be indicated by CTU while granting Connectivity or Long term Access or Medium term Open Access:

Provided that in case of a thermal generating station of 500 MW and above and a hydro generating station or a generating station using renewable sources of energy of capacity of 250 MW and above, CTU shall plan the system such that maximum length of dedicated transmission line shall not exceed 100 km from switchyard of the generating station till the nearest pooling substation of transmission licensee:

Provided that where the dedicated transmission lines have already been constructed/are under construction by CTU under coordinated transmission planning, the following shall apply:

(a) The transmission charges for such dedicated transmission lines shall be payable by the concerned generating company to the transmission licensee (including deemed transmission licensee) from the date of COD of the dedicated line till operationalisation of LTA of the generating station of the generating company:

(b) After operationalisation of the LTA, the dedicated transmission line shall be included in the POC pool and payment of transmission charges for the said dedicated transmission line shall be governed as per the CERC (Sharing of inter-state transmission charges and losses) Regulations, 2010 as amended from time to time."

4. **Amendment of Regulation 9 of the Principal Regulations:** In Clause (2) of Regulation 9 of the Principal Regulations, the words "expected to be commissioned within next 6 calendar months as per the status reported to CEA" shall be added after words "or the transmission system under execution"

5. Insertion of a new Regulation in the Principal Regulations: Regulation 15B shall be inserted after Regulation 15 of the Principal Regulations as under:

"**15B. Firming up of Drawl or Injection by LTA Customers:**

(1) The Long Term Access Customer who has been granted long term access to a target region shall, after entering into power purchase agreement for supply of power to the same target region for a period of not less than one year, notify the Nodal Agency about the power purchase agreement along with copy of PPA for scheduling of power under LTA:

Provided that scheduling of power shall be contingent upon the availability of last mile transmission links in the target region:

Provided further that on receipt of the copy of the PPA, CTU shall advise concerned RLDC for scheduling of power at the earliest, but not later than a period of one month:

Provided also that if the capacity required for scheduling of power under LTA has already been allocated to any other person under MTOA or STOA, then MTOA or STOA shall be curtailed in accordance with Regulation 25 of these Regulations corresponding to the quantum and the period of the PPA:

Provided also that where capacities under existing MTOA are curtailed for considering scheduling of power under the PPA of the Long term Access Customer, such MTOA customer shall be permitted to relinquish its MTOA without any relinquishment charges.

(2) An LTA Customer who is availing MTOA on account of non-operationalization of LTA granted to it, shall not be required to pay relinquishment charges towards relinquishment of MTOA if the LTA is operationalized during the subsistence of MTOA."

6. Insertion of new Regulation 16 B

A new regulation shall be added below Regulation 16A

"16B. Underutilisation of Long term Access and Medium term Open Access:

In case it is observed by RLDCs that the LTA or MTOA customer's request for scheduling is consistently (for more than 5 days) lower than the quantum of LTA or MTOA granted by the Nodal Agency (i.e.; CTU), RLDC may issue a notice to such LTA or MTOA customer asking the reasons for such under-utilization. The LTA or MTOA customer shall furnish the reasons for such under-utilization and will provide such details like the reduced requirement, likely period, etc. by the following day. The un-utilized transfer capability will then be released for scheduling of Medium term and Short-term open access transaction depending upon the period of such underutilization with a condition that

such transaction shall be curtailed in the event original LTA or MTOA customer seeks to utilize its capacity:

Provided that where the capacity tied up under LTA is released under MTOA, the concerned generator shall not be liable to pay the LTA charges for such reallocated capacity. "

6. **Amendment of Regulation 19 of the Principal Regulations:** Clause (2) of Regulation 19 of the Principal Regulations shall be substituted as under:

"(2) The start date of the medium-term open access shall not be earlier than 5 months and not later than 2 years from the last day of the month in which application has been made."

7. **Insertion of new Regulations:** The following new regulations shall be added after Regulation 33 and shall be numbered as Regulation 33A and 33B:

"**33A. Power to Relax:**

The Commission, for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by an affected person to remove the hardship arising out of the operation of Regulation, applicable to a class of persons.

33B. Power to Remove Difficulty:

If any difficulty arises in giving effect to the provisions of these regulations, the Commission may, on its own motion or on an application made before it by the nodal agency, by order, make such provision not inconsistent with the provisions of the Act or provisions of other regulations specified by the Commission, as may appear to be necessary for removing the difficulty in giving effect to the objectives of these regulations."

Sd/-
(Shubha Sarma)
Secretary

Note: Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009 were published in Part III, Section 4, No. 140 of the Gazette of India (Extraordinary) dated 10.08.2009 and amended vide -

(a) Amendment Regulations, 2010 which was published in Part III, Section 4, No. 225 of the Gazette of India (Extraordinary) dated 07.09.2010.

(b) Second Amendment Regulations, 2012 which was published in Part III, Section 4, No. 72 of the Gazette of India (Extraordinary) dated 22.03.2012.

(c) Third Amendment Regulations, 2013 which was published in Part III, Section 4, No. 86 of the Gazette of India (Extraordinary) dated 26. 03.2013

(d) Fourth Amendment Regulations, 2014 which was published in Part III, Section 4, No. 245 of the Gazette of India (Extraordinary) dated 21.08.2014.

(e) Fifth Amendment Regulations, 2015 which was published in Part III, Section 4, No. 171 of the Gazette of India (Extraordinary) dated 19.05.2015.

Annexure-2.1 (I)
~~*Annex. D.6*~~

Open cycle generation of AGBPP from 01.04.2015 to 31.03.2016: -

Financial Year 2015 -2016		
Month	**Open cycle generation percentage**	**OCC Approval**
July 2015	3.3415 %	101st OCC
February 2016	0.7702%	-

Month: June'15

Sl. No.	Date	GT No.	Start Time in O/C	Stop Time in O/C	Duration of O/C (hr:min)	Actual generation in O/C as per NEEPCO(MU)	Certified generation in O/C (MU)
1	01/06/2015	GTG#1	13:13	14:48	01:35	0.04510	0
		GTG#2	13:20	14:48	01:28	0.04120	0
		GTG#5	13:31	18:42	05:11	0.13970	0
		GTG#6	13:30	15:25	03:27	0.09400	0
			17:10	18:42			
TOTAL (MU)						**0.32**	**0**

Gross generation for the month(MU)= 127.985
Certified open cycle generation(MU)= 0
Open cycle percentage = 0.0000

Month: July'15

Sl. No.	Date	GT No.	Start Time in O/C	Stop Time in O/C	Duration of O/C (hr:min)	Actual generation in O/C as per NEEPCO(MU)	Certified generation in O/C (MU)
1	01/07/2015	-	-	-	-	0	0
2	02/07/2015	3	11:50	24:00	12:10	0.2730	0
3	03/07/2015	3	00:00	24:00	24:00	0.5220	0.5053
4	04/07/2015	3	00:00	24:00	24:00	0.5456	0.5288
5	05/07/2015	3	00:00	18:48	18:48	0.3598	0.3488
6	06/07/2015	3	22:02	24:00	01:58	0.0544	0.0520
7	07/07/2015	3	00:00	24:00	24:00	0.6291	0.6102
8	08/07/2015	3	00:00	24:00	24:00	0.6047	0.5883
9	09/07/2015	3	00:00	24:00	24:00	0.6670	0.6513
10	10/07/2015	3	00:00	24:00	24:00	0.7143	0.6637
11	11/07/2015	3	00:00	00:50	00:50	0.0727	0.0225
12	12/07/2015	1	21:43	24:00	02:17	0.0500	0
13	13/07/2015	1,2&5	-	-	-	0.1061	0
14	14/07/2015	1&2	-	-	-	0.1578	0
15	15/07/2015	1	-	-	-	0.0223	0
		3	12:11	16:18	04:22	0.0986	0
			16:55	17:10			
TOTAL (MU)						**4.8775**	**3.9709**

Gross generation for the month (MU): **118.8366**
Certified open cycle generation (MU): **3.9709**
Certified % of open cycle generation : **3.3415**

Month: February'16

Sl. No.	Date	GT No.	Start Time in O/C	Stop Time in O/C	Duration of O/C (hr:min)	Actual generation in O/C as per NEEPCO(MU)	Certified generation in O/C (MU)
1	25/02/2016	GTG# 1	10:25	11:05	00:40:00	0.0200	1.284429
		GTG# 3	10:22	12:03	01:41:00	0.0505	
		GTG# 4	11:15	12:25	01:10:00	0.0362	
		GTG# 6	10:39	10:55	00:16:00	0.0080	
TOTAL (MU)						**0.1147**	**1.284429**

Gross generation for the month(MU)= **166.7722**
Certified open cycle generation(MU)= **1.284429**
Open cycle percentage = **0.7702**

Annexure-2.1 (II)

~~ANNEXURE - IA~~

STATEMENT OF OPEN CYCLE GENERATION OF AGBP FOR THE MONTH OF APRIL 2015

Date	Mod/unit	Opened Cycle Hrs			Total MU	Reason for GTG tripping & Open cycle generation	Remarks
		From	To	Total hrs			
02-Apr-15	GTG# 2	13:13	14:18	**01:05:00**	0.0300	Tripping of GC # 3 & GTG load reduced. **Startup process to match the required parameters of boiler .**	
04-Apr-15	GTG# 2	12:36	15:45	**03:09:00**	0.1404	Tripping of GC # 3 & WHRB # II start up process	
		18:25	19:10	**00:45:00**		Tripping of GC # 3 & WHRB # II start up process	
		23:08	23:55	**00:47:00**		Tripping of GC # 4 & WHRB # II start up process	
05-Apr-15	GTG# 2	14:57	16:35	**01:38:00**	0.0428	Tripping of GC # 1& 4, GTG load reduced due to low gas pressure. Startup process to match the required parameters of boiler .	
	GTG# 5	23:15	23:45	**00:30:00**	0.0182	Tripping of STG # 3 due to reverse power & WHRB # V start up process	
06-Apr-15	GTG# 2	21:15	21:59	**00:44:00**	0.0211	Tripping of GC # 1& WHRB # II start up process	
07-Apr-15	GTG# 4	19:40	20:05	**00:25:00**	0.0084	Load transfer from GTG# 4 to GTG # 6	
	GTG# 6	19:29	20:31	**01:02:00**	0.0397	LGP& GTG low load condition due to low gas pressure. MS temperature problem to operate required parameters.	
		21:58	24:00	**02:02:00**		LGP& GTG low load condition due to low gas pressure. MS temperature problem to operate required parameters.	
08-Apr-15	GTG# 3	08:22	20:31	**12:09:00**	0.3582	Due to low gas pressure; low load of GTG , STG # 2 withdrwan.	L2 br. Problem at Moriani 12:30 hrs to 13:35 hrs , 16:46 V…. .problem
	GTG# 4	00:15	00:23	**00:08:00**	0.0025	GTG # 4 withdrawn due to low gas pressure & WHRB # IVstart up process	
	GTG# 6	11:45	13:15	**01:30:00**	0.0129	GTG # 6 tripped due to vibration problem. MS temperature problem to operate required parameter.	
09-Apr-15	GTG# 2	21:06	22:30	**01:24:00**	0.0287	Shutdown of GC # 4 & GTG low load condition due to low gas pr.	
10-Apr-15	GTG# 2	22:56	23:45	**00:49:00**	0.0168	Shutdown of GC # III & WHRB # II start up process	
12-Apr-15	GTG# 2	16:13	16:20	**00:07:00**	0.0116	GTG # 2 manually withdrawn due to Shutdown of GC # I & WHRB # II start up process	15:05 hrs Tsk -1 tripped (LA y-phase) B.C tripped
		18:48	19:10	**00:22:00**		GTG # 2 manually withdrawn due to Shutdown of GC # I & WHRB # II start up process	
14-Apr-15	GTG# 2	09:05	09:30	**00:25:00**	0.0173	Due to low gas pressure; low load of GTG, WHRB # II withdrawn	
		13:43	14:10	**00:27:00**		GTG # 2 manually withdrawn due to Shutdown of GC # III & WHRB # II start up process	
17-Apr-15	GTG# 2	11:55	12:10	**00:15:00**	0.0084	GTG # 2 manually withdrawn as C & I personnel were checking cables & testing as master control panel as on going R & M works of GBS.	
18-Apr-15	GTG# 2	08:31	18:45	**10:14:00**	0.2809	WHRB # II manually withdrawn due to low level of raw water reservior.	
	GTG# 6	17:17	20:40	**03:23:00**	0.0871	GTG # 6 tripped due to auxiliary power fail & MS temperature problem to operate required parameter	
20-Apr-15	GTG# 4	19:50	19:53	**00:03:00**	*0.0495*	Unit under startup process	
	GTG# 5	20:17	21:45	**01:28:00**	*0.0264*	Shifting of GTG # 5 to GTG # 4 & Unit under startup process	
	GTG# 6	19:25	20:05	**00:40:00**	*0.0200*	Unit under startup process	
21-Apr-15	GTG# 2	06:33	07:20	**00:47:00**	0.0337	Tripping of GC # III & WHRB # II start up process	
		19:02	19:32	**00:30:00**		Tripping of GC # III & WHRB # II start up process	
	GTG# 3	16:55	18:19	**01:24:00**	0.0377	Tripping of GC # III & WHRB # III start up process	
22-Apr-15	GTG# 4	01:47	10:35	**08:48:00**	0.2354	**LSD & Low Raw Water level.**	LSD
	GTG# 5	16:46	17:15	**00:29:00**	0.0016	Unit under startup process	LSD
24-Apr-15	GTG# 5	12:05	12:20	**00:15:00**	0.0014	GTG # 5 withdrawn & WHRB # V start up process	LSD, Tsk -II tripped 04:20 to 16:04 hrs
25-Apr-15	GTG# 2	13:31	15:01	**01:30:00**	0.0436	Due to low gas pressure; low load of GTG ,Withdrawal of WHRB	
	GTG# 5	00:05	01:10	**01:05:00**	0.0282	Unit under startup process	LSD 230/174 MW

28-Apr-15	GTG# 2	13:45	13:53	**00:08:00**	0.0031	Withdrawal of WHRB	
	GTG# 5	11:41	13:40	**01:59:00**	0.0496	Charging of WHRB	
29-Apr-15	GTG# 1	08:05	08:15	**00:10:00**	0.0077	S/D of STG # 1 at 8:05 hrs for attending APRDS leakage	
		20:31	20:36	**00:05:00**		GTG # 1 desynd due to GC # I S/D & tripped due to over speed and STG on S/D.	LSD 220/175 MW
	GTG# 2	21:35	23:43	**02:08:00**	0.0491	GTG # 2 desynd due to LGP & S/D of STG # 1 at 8:05 to 23:43 hrs for attending APRDS leakage & startup process	
30-Apr-15	GTG# 1	21:17	22:23	**01:06:00**	0.0297	GTG # 1 desynd due to LGP & WHRB # I startup process	LSD 198/187
	GTG# 2	22:24	22:38	**00:14:00**	**0.007**	Withdrawal of WHRB due to low gas pressure of GTG	LSD 200/192
TOTAL					**1.7487**		

STATEMENT OF OPEN CYCLE GENERATION OF AGBP FOR THE MONTH OF MAY 2015

Date	Unit	Opened Cycle Hrs			Total MU	Reason for GTG tripping & Open cycle generation	Remarks
		From	To	Total hrs			
02-May-15	GTG# 3	22:01	23:12	01:11	0.00670	Tripping of STG # 2	
03-May-15	GTG#2	03:05	03:35	00:30	0.01430	Tripping of GC # III	LSD
	GTG#5	01:36	03:25	01:49	0.05460	Tripping of GC # III	
05-May-15	GTG#3	08:31	20:24	11:53	0.23770	STG # 2 manually withdrawn to attend APRDS leakage	
05-May-15	GTG#5	12:22	12:42	00:20	0.01000	STG # 3 tripped on low vacuum ,**Unit under start up process**	
	GTG#6	12:22	12:42	00:20	0.01000	STG # 3 tripped on low vacuum ,**Unit under start up process**	**LSD (200/195)**
06-May-15	GTG#4	11:32	14:20	02:48	0.08400	**Unit under start up process**	
	GTG#5	12:09	13:30	01:21	0.03920	Unit got desynchronised due to GC # II ,**Unit under start up process**	
08-May-15	GTG#2	01:50	02:25	00:35	0.01420	GC # II tripped due control vibration (,**Unit under start up process**	**LSD 200/162 (08.05.15 to 14.05.15 pre-commissioning of BCPL(OIL)**
13-May-15	GTG#2	13:32	15:20	01:48	0.04680	Tripping of GC # III	
	GTG#3	00:00	00:35	00:35	0.01700	Charging of WHRB **(LSD 230/171.25 MW)**	
	GTG#6	01:14	02:35	01:21	0.02030	WHRB #VI under start up process	
15-May-15	GTG#2	14:42	14:50	00:38	0.02130	**S/D of GC # III**	LSD (NERLDC Request due to import in L - 1)
		19:15	19:45				LSD
17-May-15	GTG#2	11:28	11:40	00:51	0.00930	Due to minimum GTG load and WHRB start up	LSD
		13:40	14:19				LSD
19-May-15	GTG#2	08:56	11:22	05:36	0.15020	S/D of WHRB # II	**Emrgy s/d of GC # 3 , oil leakage , GC # 2 s/d**
		18:30	18:50				
		21:10	24:00				
20-May-15	GTG#2	00:00	05:05	12:45	0.35770	S/D of WHRB # II	
		09:40	17:20				
21-May-15	GTG#2	19:55	20:25	00:30	0.00750	Unit got desynchronised due to tripping of GC # III	**LSD 153/142MW**
22-May-15	GTG#2	08:14	08:46	00:56	0.02340	Unit got desynchronised due to tripping of GC # III	**LSD 174/145 MW**
		20:06	20:30				
23-May-15	GTG#2	17:55	18:56	01:01	0.02470	Tripping of GC # III & IV	**LSD 210/101 MW**
24-May-15	GTG#2	00:58	01:28	00:30	0.01260	Tripping of GC # III	**LDS 160/151.21 MW**
25-May-15	GTG#2	11:20	11:28	01:13	0.00330	S/D of GC # IV	**LSD 220/182 MW**
		21:15	22:20				
27-May-15	GTG#2	09:35	09:42	00:37	0.00720	Emergency S/D of GC # III for high defferential pr.	**LSD 177/139 MW AT 6:30 HRS**
		23:10	23:40				
28-May-15	GTG#1	12:40	15:45	03:05	0.09100	Tripping of GC # IV	**LDS (153/148 MW)**
	GTG#2	12:28	15:15	03:06	0.05470	Tripping of GC # III & IV	
		18:51	19:10				
	GTG#3	18:45	21:20	02:35	0.04820	Tripping of GC # IV	
29-May-15	GTG#2	20:50	22:15	01:25	0.03540	Tripping of GC # II	**LSD 181/165 MW 21:30 HRS**
	GTG#3	20:25	21:23	00:58	0.00030	Charging of WHRB	
TOTAL					**1.40160**		

STATEMENT OF OPEN CYCLE GENERATION OF AGBP FOR THE MONTH OF JUNE 2015

Date	Unit	Opened Cycle Hrs			Total MU	Reason for GTG tripping & Open cycle generation	Remarks
		From	To	Total hrs			
01-Jun-15	GTG#1	13:13	14:48	01:35	0.04510	**Tripping of Line 2 (Grid disturbance)**	**Kath -marioni line tripped at 12:40 hrs, dist.154 km**
	GTG#2	13:20	14:48	01:28	0.04120	**Tripping of Line 2 (Grid disturbance)**	
	GTG#5	13:31	18:42	05:11	0.13970	**Tripping of Line 2 (Grid disturbance)**	
	GTG#6	13:30	15:25	03:27	0.09400	**Tripping of Line 2 (Grid disturbance)**	
		17:10	18:42				
02-Jun-15	GTG#2	11:05	11:12	00:47	0.04900	GTG#2 withdrawn due to S/D of GC # I	**LSD 212/168.43 MW AT 00:02 hrs**
		17:54	18:34				
03-Jun-15	GTG#2	01:25	01:37	01:42	0.03900	Outage of GTG# 2 **due to tripping of GC # III**	
		19:45	21:15				
	GTG#3	12:25	15:05	03:51	0.12120	Outage of GTG# 3	
		19:54	21:05				
	GTG#5	14:17	15:50	01:33	0.01930	GTG# 5 withdrawn for syn of GTG # 1	
04-Jun-15	GTG#2	11:36	12:36	02:03	0.04990	Outage of GTG# 2 & 3 **(GC # 2 tripped at 10:10 hrs " Low suction pr. at 15:05 , 20:15 E/ stall, Gcs tripped five times as suction controler valve of indivisual GC ogt choked by Condensate & water)**	**Condensate & water**
		16:25	16:58				
		21:40	22:10				
05-Jun-15	GTG#1	10:34	13:10	02:36	0.06750	Tripping of GC # IV	**Heavy Condensate**
05-Jun-15	GTG#2	01:05	01:32	01:34	0.04150	Tripping of GC # III	
		12:31	13:38				
	GTG#3	09:31	11:15	01:44	0.04340	Tripping of GC # IV	
09-Jun-15	GTG#3	00:06	00:36	00:30	0.01300	Tripping of STG# 2, **tripping of WHRB # III (Drum level high),**	**LSD 210/166 MW**
10-Jun-15	GTG#3	07:06	07:07	00:01	0.00910	S/D of GTG # 3 due to speed fluctuation of GC # II	
		20:02	23:33	03:31		S/D of GTG # 3 for air filter replacement	
14-Jun-15	GTG#2	02:50	03:10	01:20	0.04000	Tripping of GC # III twice	**13.06.15 OIL blocked by local people**
		15:05	16:05				
	GTG#5	12:05	12:22	00:17	0.00650	Tripping of STG # 3 & start up of WHRB # V	
	GTG#6	12:05	12:22	00:17	0.00650	Tripping of STG # 3 & start up of WHRB # VI	
15-Jun-15	GTG#2	18:57	19:30	00:33	0.01500	Tripping of GC # III	
17-Jun-15	GTG#2	13:15	13:58	00:43	0.02100	S/D of GC # III	
18-Jun-15	GTG#2	19:31	20:32	01:01	0.02530	S/D of GC # IV	
19-Jun-15	GTG#2	23:55	24:00	00:05	0.00240	Tripping of GC # III	
20-Jun-15	GTG#2	00:00	00:25	01:16	0.03537	Tripping of GC # III	**LSD 204/1910 MW (01:00 hrs)**
		19:14	19:25				
		20:45	21:25				
21-Jun-15	GTG#2	08:17	09:28	01:11	0.03117	Tripping of GC # III	**LSD 202/188 MW 02:00 hrs**
22-Jun-15	GTG#1	15:25	18:41	03:16	0.03600	tripping of GC # II	**LSD 155/149 MW**
23-Jun-15	GTG#3	23:50	24:00	00:10	0.00000	Tripping of GC # II	**GC # I & III under S/D, LSD 150/133 MW**
24-Jun-15	GTG#1	00:19	08:55	10:24	0.28632	Outage of GC # I, II, III and low load	**LSD 157/124 MW at 10:30 hrs**
		19:52	21:40				
	GTG#2	23:40	24:00	00:20	0.00500	Start up of WHRB	
	GTG#3	00:00	02:35	02:35	0.07050	Tripping of GC # II	
	GTG#5	16:02	16:05	01:13	0.03500	Due to emergency stop of GC # IV and start up of WHRB	
		19:25	20:35				
25-Jun-15	GTG#2	10:45	11:05	01:03	0.02900	Due to minimum GTG load and WHRB start up	**LSD 192/162 MW at 08:30 hrs**
		16:02	16:45				
27-Jun-15	GTG#2	18:44	19:50	01:06	0.03190	Tripping of GC # III & Start up of WHRB	**LSD 210/161 MW at 14:00 hrs**
29-Jun-15	GTG#5	10:02	15:25	05:23	0.14775	S/D of STG # 3	**LSD 210/166 MW at 07:00 hrs**

Verified from log sheet
Verified from log sheet
Verified from log sheet
Verified from log sheet
Verified from log sheet

29-Jul-15	GTG#6	10:02	16:40	06:38	0.17244	S/D of STG # 3	
TOTAL					**1.7701**		

STATEMENT OF OPEN CYCLE GENERATION OF AGBP FOR THE MONTH OF JULY 2015

Date	Unit	Opened Cycle Hrs			Total MU	Reason for GTG tripping & Open cycle generation	Remarks
		From	To	Total hrs			
02-Jul-15	GTG#3	11:50	24:00	12:10	0.27300	**STG # 2 under S/D w.e.f.11:50 hrs of 02.07.15 to 18:53 hrs of 15.07.15 for Condenser cleaning .**	**Approved in 110th OCC Meeting**
03-Jul-15	GTG#3	00:00	24:00	24:00	0.52220		
04-Jul-15	GTG#3	00:00	24:00	24:00	0.54560		
05-Jul-15	GTG#3	00:00	18:48	18:48	0.35980		
06-Jul-15	GTG#3	22:02	24:00	01:58	0.05440		
07-Jul-15	GTG#3	00:00	24:00	24:00	0.62910		
08-Jul-15	GTG#3	00:00	24:00	24:00	0.60470		
09-Jul-15	GTG#3	00:00	24:00	24:00	0.66700		
10-Jul-15	GTG#1	00:23	01:45	01:22	0.03700	S/D of GTG # I for electrical works & Start up of WHRB	
	GTG#3	00:00	24:00	24:00	0.67730	STG # 2 under S/D	
11-Jul-15	GTG#2	22:18	22:50	00:32	0.01500	GTG # 2 tripped due to tripping of GC # 4 & Start up of WHRB	
	GTG#3	00:00	00:50	00:50	0.02170	**STG # 2 under Planned S/D**	
	GTG#5	21:55	23:10	01:15	0.03600	GTG # 5 desynd due to tripping of GC # 4, & Start up of WHRB	
12-Jul-15	GTG#1	21:43	24:00	02:17	0.05000		
13-Jul-15	GTG#1	00:00	02:25	02:25	0.06770	Tripping of GC # III due to Engine stall.	
	GTG#2	03:01	03:35	00:34	0.01590		
	GTG#5	03:47	04:35	00:48	0.02250	GTG # 5 tripped due to high exhaust temp. spread & Start up of WHRB	
14-Jul-15	GTG#1	00:45	03:42	02:57	0.08246	Tripping of GC # III	
	GTG#2	00:58	03:40	02:42	0.07533		
15-Jul-15	GTG#1	12:01	12:09	00:48	0.02232	To faciitate synchronisation of GTG # 3	
		23:20	24:00				
	GTG#3	12:11	16:18	04:22	0.09864	**Start up process of STG # 2 after restoration from Planned S/D.**	
		16:55	17:10				
16-Jul-15	GTG#1	00:00	00:30	19:00	0.55740	Start up process of WHRB # I.	
		05:30	24:00			**STG # I under Planned S/D for condenser cleaning**	**Approved in 110th OCC Meeting**
	GTG#2	05:30	18:20	12:50	0.36680	STG # I under S/D for condenser cleaning & start up process of WHRB # II.	
	GTG#5	18:20	18:58	00:38	0.00950	GTG #V under S/D due to tripping of high exhaust temp. spread trip, STG # 3 under start up process	
17-Jul-15	GTG#1	00:00	24:00	24:00	0.65400	**STG # I under Planned S/D for condenser cleaning**	
18-Jul-15	GTG#1	00:00	09:34	14:59	0.43600	**STG # I under Planned S/D for condenser cleaning**	
		18:35	24:00			**STG # I under Planned S/D for condenser cleaning**	
	GTG#5	18:18	19:38	01:20	0.03770	WHRB # V under start up	
19-Jul-15	GTG#I	00:00	24:00	24:00	0.72100		
20-Jul-15	GTG#I	00:00	24:00	24:00	0.59920		
21-Jul-15	GTG#I	00:00	24:00	24:00	0.61530		
22-Jul-15	GTG#I	00:00	24:00	24:00	0.72710		
	GTG#2	19:55	24:00	04:05	0.11480		
23-Jul-15	GTG#I	00:00	24:00	24:00	0.58240		
	GTG#2	00:00	05:10	08:36	0.17820	**STG # I under Planned S/D for condenser cleaning**	
		20:34	24:00				
24-Jul-15	GTG#I	00:00	24:00	24:00	0.68130		
	GTG#2	00:00	01:02	01:02	0.02150		
25-Jul-15	GTG#1	00:00	21:05	21:05	0.49480		
	GTG#2	08:30	22:10	13:56	0.22140		
		23:44	24:00				

	GTG#3	22:47	22:52	00:05	0.00080	Withdrawal of WHRB	
	GTG#4	18:30	22:45	04:15	0.08500	Charging of WHRB	
26-Jul-15	GTG#I	12:30	24:00	11:30	0.28190	**STG # I under Planned S/D for condenser cleaning**	
	GTG#2	00:00	24:00	24:00	0.63190		
27-Jul-15	GTG#1	00:00	23:02	23:02	0.54290		
	GTG#2	00:00	17:47	17:47	0.45550		
	GTG#3	23:04	24:00	00:56	0.15000	GTG # 3 under test run	
	GTG#4	15:02	15:07	01:12	0.03740	STG # 2 withdran and then WHRB under start up process	
		17:10	18:17				
30-Jul-15	GTG#2	16:10	21:22	07:47	0.21390	S/D of STG # I & start up process	
		21:25	24:00				
	GTG#4	11:01	11:10	01:00	0.03621	S/D of STG # 2	
		15:25	16:25				
31-Jul-15	GTG#1	10:14	11:58	01:41	0.00130	Outage of GTG # 1	
	GTG#2	00:00	01:35	02:10	0.00300	Outage of GTG # 2	
		21:45	22:20				
	GTG#3	23:40	24:00	00:20	0.01000	Outage of GTG # 3	
	GTG#6	10:03	10:09	00:06	0.00090	Outage of GTG # 6	
TOTAL					14.34676		

STATEMENT OF OPEN CYCLE GENERATION OF AGBP FOR THE MONTH OF AUGUST 2015

Date	Unit	Opened Cycle Hrs			Total MU	Reason for GTG tripping & Open cycle generation	Remarks
		From	To	Total hrs			
01-Aug-15	GTG#2	18:25	19:15	00:50	0.02400	Tripping of GC # III	
	GTG#3	07:25	08:40	02:00			
		17:45	18:30		0.05200		
03-Aug-15	GTG#4	03:47	04:45	00:58	0.02930	Tripping of GTG # 4	
04-Aug-15	GTG#1	11:20	11:26	00:06	0.00320	STG # 1 manually withdrawn to optimise generation in module-II due to only 1no. Running GC	
	GTG#3	11:27	12:57	01:30	0.04270	WHRB # III under start up process	
06-Aug-15	GTG#1	15:16	17:40	02:24	0.06720	GTG # 1 under start up process	
	GTG#2	14:20	17:40	03:20	0.09352	GTG # 2 under start up process	
08-Aug-15	GTG#5	13:18	24:00	10:42	0.29420	Under S/D of STG # 3	
09-Aug-15	GTG# I	02:45	03:45	01:00	0.02500	Charging of WHRB	
	GTG#5	11:40	00:00	12:20	0.34670	S/D of STG # 3	
10-Aug-15	GTG#5	00:00	24:00	24:00	0.56300		
11-Aug-15	GTG#2	12:20	12:38	00:18	0.00860	Tripping of GC # II	
	GTG#5	00:00	12:18	12:18	0.22620	S/D of STG # 3	
13-Aug-15	GTG#2	09:02	10:10	01:08	0.01500	Tripping of GC # II	
	GTG# 5	06:33	08:50	02:17	0.03990		
20-Aug-15	GTG#2	06:40	06:50	00:37	0.04400	Tripping of GC # IV	
		10:50	11:17				
	GTG#4	10:55	11:05	00:10	0.00530	WHRB # IV in start up process	
	GTG# 5	14:05	23:34	09:51	0.27810	Start up process of STG (GTG# 5 & 6 on stand by due to S/d of GC # 1 &2.)	
		23:38	24:00				
21-Aug-15	GTG # 4	13:18	17:08	03:50	0.11600		
	GTG# 5	00:00	13:20	15:43	0.38930		
		20:15	22:38				
22-Aug-15	GTG#2	13:27	14:25	00:58	0.02900	**Desynd due to tripping of GC # 2 & start up process ofWHRB # 2**	**Pre Commissioning of BCPL for two weeks w.e.f 16.08.15 to 26.08.15 .**
	GTG #5	11:35	18:45	07:10	0.19880	STG generator cooler outlet temp problem	
24-Aug-15	GTG#2	16:42	16:54	00:52	0.02430	Emergecny S/D of GC # IV	
		20:25	21:05				

25-Aug-15	GTG#2	08:01	08:07	00:56	0.02613	Emergency S/D of GC# IV	
		14:30	15:20				
26-Aug-15	GTG#1	11:55	12:30	00:35	0.01516	Due to trippng of STG#1	
	GTG#2	19:09	19:45	00:36	0.01800	Manually desynchronised due to low gas pressure	
	GTG#5	10:25	10:42	00:17	0.00784	Due to trippng of STG#II	
	GTG#6	16:54	19:37	02:43	0.05220	Manually desynchronised due to low gas pressure	
28-Aug-15	GTG#2	17:40	18:12	00:32	0.01510	Tripping of GC # III	
29-Aug-15	GTG#6	15:32	17:15	01:43	0.05160	**Unit under start up process of WHRB**	
30-Aug-15	GTG#2	17:29	19:05	01:36	0.02400	**Unit under start up process of WHRB**	
	GTG#3	15:07	17:15	02:08	0.06420	Tripping of STG#2	
31-Aug-15	GTG#2	07:05	07:56	02:23	0.06615	Tripping of GC # III &IV	
		18:01	18:33				
		22:55	23:55				
	GTG#3	08:52	10:15	01:23	0.03883	Tripping of GC # III	
	GTG#5	05:15	05:45	00:30	0.01360	Tripping of GC # III	
TOTAL					**3.30813**		

STATEMENT OF OPEN CYCLE GENERATION OF AGBP FOR THE MONTH OF SEPTEMBER 2015

Date	Mod/unit	Opened Cycle Hrs			Total MU	Reason for GTG tripping & Open cycle generation	Remarks
		From	To	Total hrs			
01-Sep-15	GTG# 2	20:30	20:44	00:29:00	0.0124	Tripping of GC # II	
		23:45	24:00				
02-Sep-15	GTG# 2	00:00	00:25	00:25:00	0.0125	Charging of WHRB& S/D of GC # I & IV	
	GTG # 4	13:05	14:28	01:23:00	0.0345		
	GTG#5	18:05	18:30	02:00:00	0.0500	Due to tripping of STG # 3	
		18:58	20:33				
	GTG#6	09:33	09:46	00:13:00	0.0066	Due to tripping of STG # 3	**(Low Gas Pressure due to National strikecalled by Trade Union)**
03-Sep-15	GTG# 5	19:32	23:17	03:45:00	0.0938	S/D of STG # 3	
	GTG# 6	16:15	23:45	07:30:00	0.1395	S/D of STG # 3	
04-Sep-15	GTG# 1	10:07	14:45	05:18:00	0.1290	S/D of STG # 1	
		16:55	17:35				
	GTG# 2	10:07	10:15	03:08:00	0.0714	S/D of STG # 1	
		11:45	14:45				
05-Sep-15	GTG# 2	08:25	09:10	00:45:00	0.0194	Less gas	
07-Sep-15	GTG# 2	04:58	05:20	00:42:00	0.0105	Tripping of GC # III & IV	
		23:12	23:32				
08-Sep-15	GTG#2	04:01	04:22	00:31:00	0.0135	Tripping of GC # IV	
		10:17	10:27				
	GTG# 6	17:39	18:40	01:01:00	0.0286	Tripping ofGC # III	
09-Sep-15	GTG# 4	05:43	05:50	01:12:00	0.0368	Emergency s/d of GC # IV	
		09:03	10:08				
10-Sep-15	GTG# 2	04:32	05:25	00:53:00	0.0194	Less gas availability	
	GTG#3	02:22	04:30	09:53:00	0.2866	Tripping of STG # 2 & S/D of WHRB	
		12:55	20:40				
	GTG#4	02:22	03:47	04:12:00	0.1344	Tripping of STG # 2 & S/D of WHRB	
		15:22	17:45				
		18:48	19:12				
11-Sep-15	GTG# 3	00:02	01:45	01:43:00	0.0499	WHRB withdrawn for rectification works.	**12 hrs Bondh on 12.09.15**
15-Sep-15	GTG# 2	13:43	15:37	01:54:00	0.0108	Tripping of GC # III	**12hrs Bondh by Tai Assom on 16.09.15**
	GTG#4	16:18	17:15	00:57:00	0.0143	Tripping of GC # III	

17-Sep-15	GTG#2	16:54	16:58	00:47:00	0.0205	Tripping of GC # I & III	
		20:12	20:55				
	GTG#4	20:15	21:00	00:45:00	0.0239	Tripping of GC # I	
	GTG# 6	12:39	13:30	00:51:00	0.0227	GTG # 6 got de-syn. due to Breaker 52 min oil press lock out	
18-Sep-15	GTG# 1	07:02	09:35	02:33:00	0.0740	WHRB withdrawn due to sudden increase of boiler water level	
	GTG# 2	15:30	16:00	00:30:00	0.1250	Tripping of GC # III & IV	
	GTG#4	15:32	16:02	00:30:00	0.0155	Tripping of GC # III & IV	
19-Sep-15	GTG# 2	00:12	00:36	00:50	0.0208	Emergency S/D of GC # IV & tripping of GC # III	
		11:22	11:50				
	GTG#4	00:12	00:45	01:11	0.0366	Emergency S/D of GC # IV & tripping of GC # III	
		11:21	11:59				
	GTG#5	11:14	11:20	01:05	0.0303	S/D of STG # 3(Manually withdrawn due to s/d of BFP # 3A).	
		18:21	19:20				
	GTG#6	11:14	11:21	1.09	0.0311	S/D of STG # 3	
		17:33	18:35				
22-Sep-15	GTG#2	17:46	18:45	:59	0.03	Tripping of GC # 2	
	GTG# 4	17:50	18:50	01:00	0.032	Tripping of GC # 2	
23-Sep-15	GTG# 4	15:38	16:20	00:42	0.021	Unit tripped due to Grid disturbance	
25-Sep-15	GTG#2	08:09	08:13	00:28	0.0128	S/D of GC # IV	
		20:16	20:40				
28-Sep-15	GTG# 3	14:54	17:36	02:42	0.0783	Tripping of STG # 2	
	GTG# 4	14:54	17:36	02:42	0.0864	Tripping of STG # 2	
TOTAL					1.8347		

Could not be verified either from logsheet or from grid disturbance report

STATEMENT OF OPEN CYCLE GENERATION OF AGBP FOR THE MONTH OF OCTOBER 2015

Date	Unit	Opened Cycle Hrs			Total MU	Reason for GTG tripping & Open cycle generation	Remarks
		From	To	Total hrs			
01-Oct-15	GTG# 2	20:29	24:00	03:31:00	0.0528	S/D of WHRB # 2(boiler problem)	
	GTG#4	20:03	21:01	00:58:00	0.0155	S/D of GTG # 4	
02-Oct-15	GTG# 2	00:00	24:00	00:00:00	0.2722	S/D of WHRB # 2 ,(boiler problem)	
03-Oct-15	GTG # 2	00:00	02:35	02:35:00	0.0132		
04-Oct-15	GTG# 2	08:10	08:45	00:35:00	0.0090	Less gas availability	
09-Oct-15	GTG# 3	10:02	10:15	00:13:00	0.0028	S/D of STG # 2 to attend APRDS leakage problem	
	GTG# 4	09:47	09:55	02:00:00	0.0300		
		16:23	18:15				
10-Oct-15	GTG#4	11:38	12:40	01:02:00	0.0340		
11-Oct-15	GTG#1	21:20	22:45	01:25:00	0.0959	Tripping of all running GCs	
	GTG# 2	20:25	21:44	01:19:00	0.0723		
	GTG#3	09:50	11:55	02:58:00	0.1275	Less gas availability & Tripping of all running GCs	
		18:51	19:44				
	GTG#4	21:25	22:46	01:21:00	0.1047	Tripping of all running GCs	
	GTG # 5	20:45	21:50	01:05:00	0.0718		
	GTG#6	17:22	18:34	01:12	0.0348		
13-Oct-15	GTG#2	22:57	23:05	00:08:00	0.0040	S/D of GC # IV	
	GTG#4	22:57	23:05	00:23:00	0.0111		
		23:45	24:00				
14-Oct-15	GTG#4	00:00	00:36	01:23:00	0.0419		
		12:40	13:27				

16-Oct-15	GTG#2	09:30	10:32	02:00:00	0.0300	Less gas & emergency S/D of GC # IV	
		16:12	16:20				
		18:49	19:39				
	GTG# 4	16:10	16:17	00:51:00	0.0170	Emergency S/D of GC # IV	
		16:31	17:15				
17-Oct-15	GTG#2	20:10	20:18	00:08:00	0.0040	S/D Of GC # IV	
	GTG# 4	20:10	20:20	01:03	0.0265		
		20:27	21:20				
18-Oct-15	GTG#2	11:10	12:05	00:55	0.0261	S/D of GC # III & IV	
22-Oct-15	GTG#2	22:14	22:45	00:31	0.01440	Tripping of GC # I	**Bandh by Moran Students on 20.10.2015**
	GTG#4	22:15	23:10	00:55	0.02950		
25-Oct-15	GTG#5	09:30	09:37	00:07	0.00280	Less gas availability	
30-Oct-15	GTG#2	05:25	05:40	00:46	0.02240	Tripping of GC # IV	
		18:19	18:50				
31-Oct-15	GTG#2	12:17	12:45	00:27	0.01280		
TOTAL					**1.17900**		

STATEMENT OF OPEN CYCLE GENERATION OF AGBP FOR THE MONTH OF NOVEMBER 2015

Date	**Unit**	**Opened Cycle Hrs**			**Total MU**	**Reason for GTG tripping & Open cycle generation**	**Remarks**
		From	**To**	**Total hrs**			
04-Nov-15	GTG#2	11:16	11:26	00:39	0.0188	Emergency S/D of GC # IV	
		15:01	15:30				
	GTG#4	11:16	11:22	01:01	0.0327		
		11:42	12:37				
07-Nov-15	GTG#2	10:18	10:25	01:03	0.0259	Tripping of GC # IV	
		15:15	16:14				
		23:56	24:00:00				
08-Nov-12	GTG#4	00:45	03:40	06:12	0.1779	Got desynd due to tripping of GC # IV,S/D of WHRB	
		04:40	07:57				
10-Nov-15	GTG#1	13:52	15:15	01:23	0.0207	Less availability of gas	
	GTG#2	15:20	15:28	00:08	0.0033		
	GTG#4	06:35	09:15	02:40	0.09078	WHRB S/D due to level transmitter problem	
11-Nov-15	GTG#2	17:59	18:35	00:36	0.0183	Less availability of gas	
12-Nov-15	GTG#2	09:35	10:10	00:35	0.0174	Tripping of GC # IV	
	GTG# 3	12:55	24:00:00	11:05	0.2435	STG # 2 S/d taken by STA Division for repairing of steam/water leakage in drum line & APRDS line, there after WHRB under start up process	
	GTG#4	11:08	15:28	04:20	0.1295	S/D of WHRB # IV &Tripping of GC # IV	
13-Nov-15	GTG#3	00:00	15:50	15:50	0.336	STG # 2 S/d taken by STA Division for repairing of steam/water leakage in drum line & APRDS line, there after WHRB under start up process	
14-Nov-15	GTG#6	11:50	11:57	00:07	0.0029	Emergency S/D of GC # IV	
15-Nov-15	GTG#6	13:03	16:25	03:22	0.0976	STG Governor & synchronizing problem	
16-Nov-15	GTG#2	05:33	05:47	00:14	0.0075	Less availability of gas	**Bandh by ATTASA on 16.11.2015.**
17-Nov-15	GTG#1	11:38	17:15	06:02	0.1461	Station Blackout (Bus coupler trip), L#3 & Station Transformer # I were at 220 KV Bus # 2, BC ckt breaker tripped due to O/C & E/F. 220 KV Bus # 2 become dead. Station load ware from Station Transformer # I. Station blackout occurred. STG tripped due to station blackout.	
	GTG#2	11:38	17:15	06:02	0.1574		
	GTG#3	11:38	19:24	08:17	0.2098		
	GTG#4	11:38	19:24	08:17	0.2176		
	GTG#6	11:38	13:45	02:12	0.0657		
18-Nov-15	GTG#2	10:05	10:15	00:17	0.0048	Less availability of gas	

20-Nov-15	GTG#2	11:41	12:20	00:39	0.0115	Charging of WHRB (LGP)	
	GTG#3	13:31	13:35	00:04	0.0012	S/D of STG # 2	
	GTG#4	11:55	12:05	00:10	0.0031		
	GTG#5	00:21	01:30	02:23	0.0445	Charging of WHRB(Steam leakage in DR-77)	
		03:20	03:24			Less availability of gas	
		13:18	14:28			Charging of WHRB	
21-Nov-15	GTG#1	11:28	14:10	02:42	0.07	Tripping of GC # II	
	GTG#2	12:01	14:20	02:19	0.06		
	GTG#5	08:26	10:20	01:54	0.045	Tripping of GC # I & II	
	GTG#6	09:02	10:48	01:46	0.045		
22-Nov-15	GTG#1	17:50	19:30	01:40	0.042	Tripping of STG # 1	
	GTG#2	17:50	19:30	01:40	0.042		
24-Nov-15	GTG#4	22:50	24:00	01:10	0.0256	**Poor quality of Gas**	
25-Nov-15	GTG#4	00:00	01:56	01:56	0.06	**Poor quality of Gas**	
26-Nov-15	GTG#3	09:55	24:00:00	14:05	0.2307	**Less availability of gas**	
27-Nov-15	GTG#3	00:00	11:31	11:31	0.2157	**S/D of STG # 2 ,Poor quality of Gas**	
TOTAL					**2.92048**		

2.96088

STATEMENT OF OPEN CYCLE GENERATION OF AGBP FOR THE MONTH OF DECEMBER 2015

Date	Unit	Opened Cycle Hrs			Total MU	Reason for GTG tripping & Open cycle generation	Remarks
		From	To	Total hrs			
04-Dec-15	GTG# 3	17:06	17:10	00:04	0.0188	Emergency S/D of GC # III	
	GTG# 4	16:01	17:05	01:04			
		11:42	12:37	00:55			
13-Dec-15	GTG#2	20:08	20:45	00:37		Tripping of GC # II	
	GTG#4	20:06	21:35	01:29	0.0115		
14-Dec-15	GTG# 3	07:21	10:15	02:54	0.0644	Less availability of gas	
15-Dec-15	GTG#2	14:35	15:05	00:30	0.015	Tripping of GC # II	
	GTG#3	14:40	17:50	02:54	0.435		
	GTG#4	18:30	19:40	01:10	0.035		
	GTG#6	13:50	19:20	05:30	0.165		
16-Dec-15	GTG#1	16:03	17:05	01:02	0.0331	S/D of GC # I	
	GTG#2	08:35	08:44	00:41	0.0205		
		15:25	15:57				
	GTG#3	12:50	13:30	00:40	0.0127	Tripping of GC # IV	
	GTG#4	12:45	13:30	00:45	0.018		
18-Dec-15	GTG#1	08:25	13:38	08:07	0.203	Tripping of all running GCs	**Due to heavy flow of condensated Crude Oil w.e.f. 17.12.2015 (U#3 tripped at 02:23 hrs on 18.12.15 for low suction pressure S/D upto 21.12.2015.**
		21:05	23:59				
	GTG#2	05:25	13:38	08:13	0.2395		
	GTG#3	05:50	08:10	02:20	0.0723		
	GTG#4	04:04	08:15	04:11	0.1437		
	GTG#6	04:11	05:50	01:39	0.0471		
20-Dec-15	GTG#6	05:00	07:40	02:40	0.0791	Tripping of STG # 3 due to reverse power	
21-Dec-15	GTG#6	10:20	13:40	12:30	0.2533	STG # 3 S/D for repairing of DR -68 & MS -36 valves leakage.	
		14:23	23:33				
22-Dec-15	GTG#2	00:35	01:15	01:45	0.0443	Tripping of GC # III & S/D of GC # I & II	
		16:17	16:24				
		21:37	22:35				
	GTG#3	00:17	02:36	02:19	0.0747		

22-Dec-15	GTG#4	00:22	02:36	03:45	0.0975	Tripping of GC # III & S/D of GC # I & II	
		16:16	16:22				
		22:05	23:30				
	GTG#6	01:36	13:02	11:26	0.1195	STG # 3 S/D for repairing of DR -68 & MS -36 valves leakage.	
23-Dec-15	GTG#1	09:52	09:56	00:58	0.03	S/D of GC # II	
		14:31	15:25				
	GTG#4	09:46	09:55	00:54	0.0288		
		15:25	16:10				
	GTG#5	15:35	19:57	04:22	0.1092	S/D of GC # II & condensate with gas	
24-Dec-15	GTG#4	03:15	03:25	01:20	0.0235	Heavy flow of condensate with gas	
		20:25	21:35				
30-Dec-15	GTG#5	02:05	12:40	10:35	0.2857	STG # 3 S/D due to Ckt bkr problem	
TOTAL					**2.6802**		

STATEMENT OF OPEN CYCLE GENERATION OF AGBP FOR THE MONTH OF JANUARY ,2016

Date	Mod/unit	Opened Cycle Hrs			Total MU	Reason for GTG tripping & Open cycle generation	Remarks
		From	To	Total hrs			
06-Jan-16	GTG# 2	11:58	12:32	00:34:00	0.0186	Tripping of GC # 4 & WHRB start up process	
	GTG# 5	13:51	15:58	02:07:00	0.0593	Tripping of GC # 4 & GTG load reduced. Delayed to startup STG due to MS temperature problem to operate required parameters	
	GTG# 6	12:25	14:20	01:55:00	0.0288	Tripping of GC # 4 & GTG low load condition. Delayed to startup STG due to MS temperature problem to operate required parameters	
10-Jan-16	GTG # 5	09:15	10:35	01:20:00	0.0250	Unit tripped due to turbine air inlet diff. pr. Switch fault thereafter due to low gas pr. GTG load reduced. MS -51 opened at 10:35 hrs	
11-Jan-16	GTG# 2	04:43	05:01	00:18:00	0.0090	Tripping of GC # 2 & WHRB start up process	
	GTG# 5	10:07	10:45	00:38:00	0.0181	Tripping of GC # 2 & WHRB start up process	
12-Jan-16	GTG# 2	05:22	06:01	00:39:00	0.0000	Tripping of GC # 3 & WHRB start up process	
	GTG# 4	15:51	17:05	01:14:00	0.0186	Tripping of GC # 3 & due to capacity of running GCs GT load could not raise to start WHRB	
	GTG# 5	15:31	15:50	00:19:00	0.0000	To replace Inlet air filter.	
13-Jan-16	GTG# 2	08:46	16:15	07:29:00	0.2245	Tripping of GC # 2 & SGT Shutdown due to transformer oil leakage from gasket 'O' ring vap	
	GTG# 3	08:45	09:28	00:43:00	0.0130	Tripping of GC # 2 & WHRB start up process	
		15:31	15:40	00:09:00		Tripping of GC # 2 & WHRB start up process	
	GTG# 4	09:02	09:54	00:52:00	0.0130	Tripping of GC # 2 & WHRB start up process	
	GTG# 5	16:22	17:25	01:03:00	0.0300	To replace Inlet air filter.GTG low load due to less gas pr. Delayed to startup STG due to MS temperature problem to operate required parameters	
14-Jan-16	GTG# 3	06:55	08:10	01:15:00	0.0114	Low gas pressure, GTG low load condition	
17-Jan-16	GTG# 2	12:08	12:20	00:12:00	0.0250	Low gas pressure	
		20:57	21:45	00:48:00		Low gas pressure	
23-Jan-16	GTG# 3	19:43	19:48	00:05:00	0.0018	Low gas pressure	
24-Jan-16	GTG# 3	13:43	15:37	01:54:00	0.0110	Low gas pressure, WHRB manually opened due to low gas pressure	
		19:50	19:53	00:03:00		Low gas pressure	
	GTG# 5	14:20	16:45	02:25:00	0.0678	STG # 3 tripped due to turbine front brg. Temp. high	
	GTG# 6	14:20	14:30	00:10:00	0.0300	STG # 3 tripped due to turbine front brg. Temp. high	
		19:40	20:30	00:50:00			
30-Jan-16	GTG# 3	08:33	09:50	01:17:00	0.0244	Low gas pressure, GTG low load condition, MS temperature problem.	
31-Jan-16	GTG# 1	14:03	15:12	01:09:00	0.0416	STG # 1 tripped due to low forwarded power	
	GTG# 2	02:10	02:20	00:10:00	0.0004		
TOTAL					**0.6713**		

STATEMENT OF OPEN CYCLE GENERATION OF AGBP FOR THE MONTH OF FEBRUARY 2016

Date	Mod/unit	Opened Cycle Hrs			Total MU	Reason for GTG tripping & Open cycle generation	Remarks
		From	To	Total hrs			
01-Feb-16	GTG# 2	20:01	21:42	**01:41:00**	0.0255	Unit under startup process	

04-Feb-16	GTG# 2	19:20	19:33	**00:13:00**	0.0009	Unit under startup process	
05-Feb-16	GTG# 2	21:12	22:30	**01:18:00**	0.0200	Unit under startup process	
07-Feb-16	GTG# 2	20:12	20:35	**00:23:00**	0.0110	Unit under startup process	
	GTG# 4	23:25	24:00	**00:35:00**	0.0185	Unit under startup process	
08-Feb-16	GTG# 4	00:00	00:15	**00:15:00**	0.0349	Emergency S/D of GC # II & Unit under startup process	
		05:40	05:45	**00:05:00**			
		08:13	09:01	**00:48:00**			
14-Feb-16	GTG# 4	09:05	09:10	**00:05:00**	0.0002	LGP & Unit under startup process	
20-Feb-16	GTG# 2	08:58	10:05	**01:07:00**	0.0365	GTG on standby due to low gas pressure & WHRB # II start up process	
		23:54	24:00	**00:06:00**		GTG got desynd without any reason & WHRB # II start up process	
23-Feb-16	GTG# 2	14:50	15:28	**00:38:00**	0.0180	Starting process of WHRB # II (Due to tripping of GC# III).	
	GTG# 4	22:37	23:32	**00:55:00**	0.0293	Starting process of WHRB # II (Due to tripping of GC# III).	
25-Feb-16	GTG# 1	10:25	11:05	**00:40:00**	0.0200	WHRB # I out due to grid dist. & high frequency.	Verified from FLASH REPORT
	GTG# 3	10:22	12:03	**01:41:00**	0.0505	GTG # 3 desynd due to grid dist. & WHRB start up process	Verified from FLASH REPORT
	GTG# 4	11:15	12:25	**01:10:00**	0.0362	GTG # IV desynd due to grid dist. & GTG low load condition due to Low gas pr. Delayed to startup WHRB # IV due to MS temperature problem to operate required parameters	Verified from FLASH REPORT
	GTG# 6	10:39	10:55	**00:16:00**	0.0080	WHRB # VI out due to grid dist. & high frequency.	Verified from FLASH REPORT
26-Feb-16	GTG# 1	04:53	07:38	**02:45:00**	0.0825	GTG #1 tripped due to GC # II tripped & WHRB withdrwan due to less gas supply.	
	GTG# 2	04:45	07:38	**02:53:00**	0.0865	GTG # 2 tripped due to GC # II tripped & WHRB withdrwan due to less gas supply.	
	GTG# 3	05:38	08:43	**03:05:00**	0.0617	GTG # 3 tripped due to GC # II & III tripped & WHRB withdrwan due to less gas supply.	
	GTG# 4	20:42	21:30	**00:48:00**	0.0176	WHRB withdrwan due to less gas supply.	
29-Feb-16	GTG# 3	10:25	18:18	**07:53:00**	0.2930	WHRB withdrawn due to low gas pressure.	
		19:19	23:10	**03:51:00**		STG tripped due to BFP -2B tripping & hot well level & Deareator level problem	
	GTG# 4	10:25	15:45	**05:20:00**	0.3092	WHRB withdrawn due to low gas pressure.	
		16:22	18:48	**02:26:00**		S/d of WHRB # III & IV for maitenance by div.	
		19:19	23:55	**04:36:00**		STG tripped due to BFP -2B tripping & hot well level & Deareator level problem	
	GTG# 5	07:03	10:05	**03:02:00**	0.0780	Diverter damper problem of both WHRB # V & VI . Sec oil pr. fluctuation & speed fluctuation of STG # III.	
	GTG# 6	07:03	10:05	**03:02:00**	0.0720	Diverter damper problem of both WHRB # V & VI . Sec oil pr. fluctuation & speed fluctuation of STG # III.	
TOTAL					**1.3100**		

STATEMENT OF OPEN CYCLE GENERATION OF AGBP FOR THE MONTH OF MARCH, 2016

Date	Mod/unit	Opened Cycle Hrs			Total MU	Reason for GTG tripping & Open cycle generation	Remarks
		From	To	Total hrs			
02-Mar-16	GTG# 2	11:32	11:40	**00:08:00**	0.0038	WHRB # II manually withdrwan due to low gas pressure	
06-Mar-16	GTG# 1	02:45	04:31	**01:46:00**	0.04	Got Desyn due to tripping of GC # 2 and load rising problem of GTG # I.	
	GTG# 3	02:42	03:45	**01:03:00**	0.035	Got Desyn due to tripping of GC # 2 & GTG low load condition due to Low gas pr.	
	GTG# 4	03:06	03:50	**00:44:00**	0.017	Got Desyn due to tripping of GC # 2 & Starting process of WHRB# IV	
11-Mar-16	GTG# 1	14:30	14:40	**00:10:00**	0.0035	WHRB # I withdrawn for replacement of Inlet Air Filter	
	GTG# 2	12:08	14:01	**01:53:00**	0.031	WHRB # II withdrwan due to low gas pressure & Unit under startup process.	
16-Mar-16	GTG# 5	14:43	15:09	**00:26:00**	0.0065	GTG # 5 manually desynd and stopped for maintenance works , WHRB withdrawn.	**From 12.03.16 to 19.03.16, gas production suffered due to miscreant activities in East Dechal Area**
17-Mar-16	GTG# 2	00:55	01:20	**00:25:00**	0.0063	Got desynd due to tripping of GC # 2 & Starting process of WHRB# II .	
19-Mar-16	GTG# 4	16:30	17:12	**00:42:00**	0.0233	GTG tripped due to fire fighting detector maloperation & Starting process of WHRB# IV .	
22-Mar-16	GTG# 2	11:52	12:15	**00:23:00**	0.0057	Tripping of GC # 2 & Unit under startup process.	
23-Mar-16	GTG# 2	07:40	08:05	**00:25:00**	0.0029	WHRB# I manually withdrwan due to low gas pressure & Unit under startup process.	
	GTG# 5	07:23	08:30	**01:07:00**	0.0223	WHRB # V manually withdrwan due to low gas pressure & Unit under startup process.	

24-Mar-16	GTG# 2	07:30	08:55	**01:25:00**	0.0212	WHRB # II manually withdrwan due to low gas pressure & Unit under startup process.	
	GTG# 5	09:10	09:29	**00:19:00**	0.0047	WHRB # V manually withdrwan and GTG stopped for installation of gas flow meter.	
26-Mar-16	GTG# 4	10:39	10:47	**00:08:00**	0.0041	WHRB # IV manually withdrwan due to low gas pressure & Unit under startup process.	
	GTG# 5	08:12	10:36	**02:24:00**	0.025	WHRB # V manually withdrwan due to low gas pressure & Unit under startup process.	
27-Mar-16	GTG# 1	08:58	09:07	**00:09:00**	0.0401	WHRB # 1 manually withdrwan due to low gas pressure & Unit under startup process.	
		15:18	16:31	**01:13:00**			
	GTG# 3	16:10	16:15	**00:05:00**	0.0024	Starting process of WHRB# III	
	GTG# 4	07:58	08:56	**00:58:00**	0.0297	Starting process of WHRB# IV	
28-Mar-16	GTG# 3	14:28	15:45	**01:17:00**	0.0269	WHRB # III manually withdrwan due to low gas pressure & Unit under startup process.	
	GTG# 6	14:40	14:46	**00:06:00**	0.003	WHRB # VI manually withdrwan due to low gas pressure & Unit under startup process.	
30-Mar-16	GTG# 2	12:40	12:50	**00:10:00**	0.0372	WHRB # VI manually withdrwan due to low gas pressure & Unit under startup process.	
		13:35	15:05	**01:30:00**			
	GTG# 5	13:30	13:44	**00:14:00**	0.0016	WHRB # VI manually withdrwan due to low gas pressure & Unit under startup process.	
	GTG# 6	12:38	13:20	**00:42:00**	0.014	WHRB # VI manually withdrwan due to low gas pressure & Unit under startup process.	
Total					0.4072		
Ttotal for the year					**33.57811**		

Annexure- 2.3

Financial Year 2016-17 (Upto 22nd December 2016)											
Regulating Entity: Regulated Entity:	Generating Station from where regulation is done.	Quantum of regulated power. (in MWH)		Mode of sale of regulated power (through exchange or through traders or UI etc)	Total revenue earned from sale of regulated power in. in (Rs)	Detail of expenditure incurred towards (a) adjustment of energy charges (b) registration fee for exchanges or traders' fee etc (c) any other incidental expenses with details in. in (Rs)			Amount of outstanding dues of Regulated Entity in. in (Rs)	Amount adjusted against the outstanding dues of the Regulated Entity in. in (Rs)	Remaining amount, if any to be passed on to the Regulated Entity. in (Rs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)			(8)	(9)	(10)=(6)-(7)-(9)
		As per REA	As per Trading			(a)	(b)	(c)			
Regulating Entity: NEEPCO	KOPILI	92426.600	84406.513	Through Exchange	17,24,11,336.47	4,52,09,144.00	1,14,500.00				
	KOPILI-II	7109.839	6289.195	Through Exchange	1,31,45,814.77	59,78,453.00	1,14,500.00				
	KHANDONG	18261.318	16321.313	Through Exchange	3,37,95,268.83	1,37,21,300.00	1,14,500.00				
Regulated Entity: MeECL	*RHEP*	*128685.656*	102997.205	Through Exchange	21,33,25,943.75	10,37,34,493.00	1,14,500.00		54,42,97,423.00	35,96,49,167.25	0.00
	DHEP	*28069.301*	23712.528	Through Exchange	5,02,86,312.33	6,17,00,849.00	1,14,500.00				
	AGBPP	*372291.848*	94106.042	Through Exchange	20,94,15,852.79	15,15,39,900.00	1,14,500.00				
	AGTPP	*83347.474*	62931.595	Through Exchange	14,40,37,031.31	9,40,82,754.00	1,14,500.00				
	TOTAL	**730192.036**	**390764.390**		**83,64,17,560.25**	**47,59,66,893.00**	**8,01,500.00**	**0.00**	**54,42,97,423.00**	**35,96,49,167.25**	**0.00**

Note: The outstanding shown in column (8) is as on 31st December 2016 and excluding the late payment surcharge.

पूर्वोत्तर क्षेत्र के वित्तीय वर्ष 2016-17 के विचलन बकाया की स्थिति (पिछले साल सहित)
Deviation Outstanding status of NER for FY-2016-17(including Last years O/S)

Annexure-7.1

16-01-2017	22-01-2017	तक	आज की तारीख में/As on 07-02-2017	Figs in Lacs

घटक/Constituents	टोटल/TOTAL (Till wk-42 of FY16-17)		टोटल/TOTAL (Disb. Till wk-42)Part		टोटल / TOTAL		O/S PAYABLE >13 WEEKS
	पूल के लिए देय / Payable to Pool	पूल से प्राप्य / Receivable from Pool	भुगतान किया / Paid	प्राप्त / Received	O/S Payable to Pool	O/S Receivable from Pool	
अरुणाचल प्रदेश / Ar. Pradesh	8364.69	492.48	7572.56	492.48	792.13	0.00	206.07
असम / Assam	26283.81	127.26	21654.53	127.26	4629.28	0.00	2557.40
मणिपुर / Manipur	2084.79	763.22	1884.93	758.86	199.86	4.36	38.14
मेघालय / Meghalaya	2106.15	2317.12	1636.92	2160.24	469.23	156.88	337.13
मिजोरम / Mizoram	4091.19	74.12	3685.26	74.12	405.93	0.00	29.06
नगालैंड / Nagaland	4570.92	258.76	4317.06	258.76	253.86	0.00	0.00
त्रिपुरा / Tripura	9672.40	491.26	9630.73	461.76	41.67	29.49	0.00
लोकतक / Loktak	57.67	303.23	57.67	297.09	0.00	6.14	0.00
नीपको / NEEPCo	1157.92	6678.36	1171.02	6579.10	-13.10	99.26	0.00
ई आर / ER	24989.07	91724.88	16842.44	90072.78	8146.63	1652.09	
ओटीपीसी/ OTPC	1696.80	4313.64	1696.69	4312.72	0.11	0.92	0.00
एनटीपीसी / NTPC	1363.08	1901.60	1276.66	1901.60	86.42	0.00	0.00
एन आर / NR	62390.74	26918.87	59396.19	14810.52	2994.55	12108.36	
बि.एन.सि / BNC	1.51	79.98	1.50	75.50	0.02	4.48	0.00
VAE	5.67	147.84	0.00	0.00	5.67	147.84	
टोटल / TOTAL	148836.44	136592.62	130824.17	122382.80	18012.27	14209.82	
PSDF		12243.82		6917.98		3802.45	

Annexure-7.2

REACTIVE POOL ACCOUNT DETAILS : 2016-17

As on 06.02.17

Upto Week -40

All figures in ₹

Annexture-I

Sl. No	States	PREVIOUS YEAR Paste D Value		CURRENT YEAR AS PER THIS WORKBOOK				Int. Status sheet		Formula
		Outstanding Payable Amt. (upto 31.03.16)	Outstanding Recivable Amt. (upto 31.03.16)	Amt. payable to pool (2016-17)	Amt. paid to pool (2016-17)	Amt. Receivable from pool (2016-17)	Amt. Received from pool (2016-17)	Reactive int. payable o/s (Upto 30.09.15)	Reactive int. Receivable o/s (Upto 30.09.15)	Outstanding payable(+) / receivable (-)
		1	2	3	4	5	6	7	8	9
1	Ar. Pradesh	1756675	0	1713307	1298726	864	0	0		2170392
2	Assam	0	3204798	2854024	0	789671	1324357	0	1106833	-922922
3	Manipur	5771029	0	16229	0	118924	0	1028023		6696358
4	Meghalaya	0	1591259	0	0	6052861	2019434	1176665		-4448020
5	Mizoram	748981	0	1452602	1319892	0	0	0		881691
6	Nagaland	193212	0	872240	725173	73594	0	0		266685
7	Tripura	0	158576	721929	0	311655	0	28565		280263
	TOTAL	8469898	4954633	7630331	3343791	7347569	3343791	2233253	1106833	4924447