

DRAFT MINUTES OF THE 2ND MEETING OF THE COMMITTEE ON ENERGY MINERALS AND RESOURCES (GR V OF CGPB), HELD ON 10TH DECEMBER, 2009, AT NATURAL ENERGY RESOURCES (M IIB), KOLKATA

- 2.1.0 The 2nd Meeting of the Committee on Energy Minerals and Resources (Gr V of CGPB) was held on 10th December 2009, under the Chairmanship of the Convener, Shri B.K. Jena, Deputy Director General, Natural Energy Resource (M IIB), GSI, Kolkata.
The list of participants is attached in the accompanying Annexure.
- 2.1.1 Welcoming the members of the Committee, Shri G. Mukherji, Member Secretary said that this Committee has been playing a crucial role in the exploration arena of the solid fossil fuels. It was in fact, instrumental in steering the exploration activity in the right track in tune with the goals and visions as laid down in the Plan documents of the Government, through meaningful co-ordination and interactions amongst the exploration agencies and related organizations in the National and State levels.
He further opined that the resource base of the solid fossil fuel have not only been consolidated and augmented through these activities but the knowledge treasure developed on the plethora of information provided a deep insight and enabled the policy makers at the highest echelon of the Government to draw and frame the short and the long term policies for judicious utilization of the resources to ensure steady growth of the industrial sectors and energy security for the country. Recent induction of geo-thermal energy resources within the ambit of this Committee and inclusion of new and additional organizations of national repute is another stride towards expansion of the sphere of activities and more positive contributions of this Committee is envisaged in this field in the coming days.
He invited the Convener for his opening remarks.
- 2.1.2 At the outset the Convener welcomed all the participating members and expressed his pleasure to find such a considerable participation from the State departments.
He described coal/lignite, the subject matter under deliberation as a combustible sedimentary material of organic origin which sufficient ignition to all other ore minerals metallic or non-metallic, for their transformation into best utilizable form through power generated by burning this commodity in Thermal Power Plants. Hence it is considered to be at the forefront of all other mineral commodities.
He mentioned that the Industrial Revolution, which began in Britain in the early part of the 19th Century, was fuelled by coal and at present 51% of our country's requirement of power is met through coal burning in Thermal Power Plants.

He further mentioned that in our national endeavor for its resource availability, we have come a long way from the initial stage, when first coal mining was commenced by East India Company in 1774, by exploring considerable areas of the various Gondwana basins. He expected that the remaining prognosticated potential coal bearing area, delineated at the end of the X Plan period (excluding the areas earmarked for CBM exploration) will be completed by the end of the XI Plan period or latest by the first year of the next Plan period, subject to timely obtaining the necessary forest clearance and favorable ground condition.

He gave a succinct account of the decisions taken during the course of the Core Group meeting of this Committee.

He thanked all concerned for the initiatives taken by the Governments of Nagaland and Assam for their efforts to undertake Regional coal exploration under Promotional funding. He concluded his deliberation by suggesting that the interactions in this meeting should be goal orientated, ensuring fulfillment of the objective and in turn playing a decisive role in furtherance of the national endeavor to supplement a credible resource base for the country's energy security.

2.2.0 Follow up of the action taken report on the decisions of the 1st Meeting of the Committee

2.2.1 In response to Para 1.1.2 it was informed that all concerned State agencies have already been requested to take up Regional coal/lignite exploration under Promotional funding. Till date DGM, Assam and DGM, Nagaland have already submitted proposals in this regard.

In response to the request by the Directorate of Geology, Orissa for delineation of potential areas in order to take up regional coal exploration, GSI has readily communicated the required information. To a proposal by DGM, Rajasthan for some target areas to take up lignite exploration, Shri Kamraj, representative of NLC informed that some of the required information like borehole locations, proposed quantum of work, capacity of resources for taking up geophysical logging, lignite analyses etc have not been supplied by DGM, Rajasthan. Official communication in this regard will be made shortly by NLC.

(Action: NLC)

In respect of making relevant exploration data (Para1.1.2) pertaining to CBM leasehold areas available to GSI, it was decided that a mutually convenient date would be fixed by GSI and DGH.

(Action: GSI & DGH)

- 2.2.2 In the context of resource base of Nagaland, Shri D. Bhattacharya, Director, GSI informed the house that in the latest National Inventory 21million tones (m.t hereafter) of coal has been shown as the resource position of Nagaland. Further resource data, as supplied by DGM, Nagaland was not in proper format and thus, cannot be integrated and incorporated in the National Inventory in its present form. Representative of Nagaland informed the House that the latest supplied resource base of 287 m.t. of coal was mainly based on spot estimation only. After detailed discussion it was decided that relevant incorporation of the additional resource base of 287m.t. will be made in the National Inventory only after through scrutiny by GSI. In this context the Committee advised that in future to avoid confusion, DGM, Nagaland should not communicate any resource base independently to the Ministry, prior to scrutiny of data relating to such resources by GSI, followed by its incorporation in the National Inventory. **(Action: DGM, Nagaland)**
- 2.2.3 In response to Para 1.2.2, Shri Visen, MECL informed that the area identified earlier could not be taken up due to adverse ground condition. However, search is still on to find out a suitable area for taking up coal exploration in Northeastern region. **(Action: MECL)**
- 2.2.4 In connection with the issue of resolving the problem of RDBMS software (Para 1.2.3) representative of NLC informed that recently MECL has noted the problem in the software to resolve the problem.
- 2.2.5 In response to Para 1.2.4 representative of CIMFR informed that due to shortage of manpower draft collaborative programmes could not be formulated. However Mrs. Choudhury, CIMFR assured to look into the matter in order to speed up the formulation process.
- 2.2.6 In response to Para 1.2.5, GSI indicated that the said programme (Bugga-Manuguru coal belt of GVC) is likely to be taken up during FY 2010-11.
- 2.2.7 In the context of following ISP norm for computation of resources (Para 1.2.7), request has again been made to all concerned to adhere to the requisite method of calculation. **(Action: All concerned agencies)**
- 2.2.8 In response to the request to drill up to the base of Barakar in Chintalpudi sub-basin (Para 1.4.4), Dr. Mukherjee, Director, GSI informed that request would be acceded to, subject to availability of high capacity drilling machine. **(Action: GSI)**
- 2.2.9 In response to Para 1.4.8, GSI informed that last year no lignite resource data has been received from CGM, Gujarat. In reply representative from Gujarat informed that data could not be supplied last year due to other priorities. However, he assured to supply the data in

- proper format and within the stipulated period this year. (Action: CGM, Gujarat)
- 2.2.10 The issue of taking up of the balance of targeted drilling meterage of F.Y. 2009-10 by MECL (Para 1.5.1) was discussed. Shri Visen, MECL expected that MECL would be able to take up such balance meterage next year, thereby the gap between the target and achievement might be narrowed down in respect of the XI plan target. (Action: MECL)
- 2.2.11 All the concerned agencies were requested to supply previous resource data in case of revision in augmentation of resources (Para 1.5.7). In reply Shri Ahmad, CMPDIL informed that the Regional Institutes have already been advised accordingly.
- 2.2.12 A detailed discussion was held on forest clearance (Para 1.5.11), causing delay in achieving committed target of exploration. All the National Exploration Agencies expressed their deep concern and were apprehensive about achieving the target within the stipulated time frame due to (a) delay in forest clearance as well as (b) prevailing law and order situation in certain areas.
Shri Khan, Joint Advisor, Planning Commission intimated the House that initiative has already been taken for obtaining necessary permission to carry out exploration in forest area.
- 2.2.13 In response to Para 1.5.19, MECL conveyed that proposal for taking up drilling in 1.6km grid interval around positive boreholes in Bangarasar-Jaimalsar area, Bikaner district, Rajasthan has already been submitted to NLC. In response, NLC informed that communication in this regard would be made shortly. (Action: NLC)
- 2.3.0 Ratification of the minutes of the 2nd Meeting of the Committee on Energy Minerals and Resources (Gr V of CGPB), Core Group Meeting and Meeting of the Expert Committee for revision of Promotional rates**
- 2.3.1 The minutes of the above meetings were ratified.
- 2.4.0 Review of the work**
- 2.4.1 Representatives of respective agencies presented the achievements and highlights of the work carried out by different agencies.
- 2.5.0 Discussion on Agenda items**
- 2.5.1 Reassessment of resources by MECL
Shri Ahmad, CMPDIL pointed out that the resource estimated by MECL through promotional exploration in Sattupalli, Kachinapalli, Bundell and Marwatola needs to be reassessed for inclusion in the National Inventory. Shri Bhattacharya, GSI explained the

methodology for such reassessment in detail. After the discussion it was decided that MECL would supply the required data by February 2010.

(Action: MECL)

2.5.2 Efforts to ensure achievement of promotional drilling target of 2009-10

Shri Ahmad, CMPDIL emphasized on the enhancement of progress of Promotional drilling for achieving the target set for 2009-10.

Both GSI and MECL assured the House that efforts would be made to achieve the target as far as possible.

(Action: GSI, CMPDIL & MECL)

2.5.3 Non-utilization of the 10% promotional fund, earmarked for NE region

Shri Ahmad, CMPDIL informed that due to inadequate proposals to undertake Promotional exploration in NE region, utilization of 10% fund might be difficult. During discussion it was found that in response to the request of the Committee only DGM, Assam and DGM, Nagaland have so far submitted their proposals. It was decided that request would again be made to the remaining concerned States of the NE region to participate in the Promotional exploration programme.

(Action: Member Secretary)

2.5.4 Approval of proposed programmes of 2010-11 BE

BE for the proposed drilling target of 1,71,000 metre along with other work component of the Promotional exploration programmes for 2010-11 was approved. It was decided however that the drilling target for lignite exploration might be modified, subject to the results of the HRS survey.

2.5.5 Approval for proposed promotional work by of DGM, Assam and DGM, Nagaland

The proposed Promotional exploration programmes of DGM, Assam and DGM, Nagaland were accorded due approval. DGM, Nagaland was requested to communicate CMPDIL with endorsement to the Member Secretary, indicating their target for 2009-10 and 2010-11 and a commitment to deploy their resources for the said exploration.

(Action; DGM, Nagaland)

2.5.6 Supply of resource data in proper format

Shri Bhattacharya, GSI pointed out that despite the request made during the course of several earlier meeting of the Committee, some of the agencies are still not supplying the data in proper format. Hence, request has again been made to all the concerned agencies to follow the format as well as the time schedule.

(Action: All concerned agencies)

2.5.7 Prior intimation regarding allotment of regionally explored blocks

Shri Bhattacharya, GSI said that some of the regionally explored blocks are being allotted for captive mining. In such cases intimation prior to allotment may be provided, so as to initiate preparation of customized data package in advance for providing the same as per requirement.

In reply, Shri Ahmad, CMPDIL assured that, as far as practicable the name of the blocks along with their co-ordinates will be intimated to GSI. **(Action: CMPDIL)**

2.5.8 Approval of new programmes of GSI

The following proposed programmes of GSI for 2010-11 were approved

i) Regional exploration for coal in Korara-Danara area, Talcher coalfield, Angul district, Orissa.

a) Area: 25sq.km. (Lat. 20°55'00" to 20°56'55"; Long. 84°52'28" to 85°05'57"); b) Exploratory Drilling: 2750m. c) Geophysical logging 2750m; d) LSM: 25sq km.; e) CS: 70m.; f) CPS: 3no.

ii) Regional exploration for coal in Nuagaon North area Talcher Cf, Angul district, Orissa.

a) Area: 30sq km. (Lat. 21°07'30" to 21°10'00"; Long. 84°40'40" to 84°46'33"); b) Exploratory Drilling: 3300m; c) Geophysical logging: 3300m; d) CS: 300m; f) CPS: 5 no

iii) Regional exploration for coal in South of Hingla river, Raniganj Cf, Bardhaman District, West Bengal

a) Area: 20 sq km. (Lat. 23°44'08" to 23°47'25"; Long. 87°13'35" to 87°18'25"); b) Exploratory Drilling: 4400 m; c) Geophysical logging: 4400 m; d) LSM: 20 sq km; e) CS: 80m; f) CPS: 6 no **(Action: GSI)**

2.5.9 Modification of block boundary of Hadda north and west area, Bikaner district, Rajasthan

The following modification of the block boundary has been ratified.

Area 260 sq km; (Lat. 27°38'20" to 27°51'20"; Long. 72°37'00" to 73°04'00")

(Action: GSI)

2.5.10 Streamlining of certification and sanctioning procedure for Geophysical logging claim.

Shri Babu Rao, SCCL informed that the bills raised by SCCL for geophysical logging of MECL's promotional exploration boreholes in SCCL command area are not certified as the boreholes could not be covered by Density logging.

He requested that the Committee might give a clear-cut guidelines for such issues. After detailed discussion it was decided that blanket permission for such issues is not possible.

Permission could only be accorded on case-to-case basis. **(Action: SCCL)**

- 2.5.11 To expedite taking up of HRS surveys in the identified blocks of GVCF by NGRI
Dr. Seshunarayana, NGRI assured that the proposed survey would be taken up shortly.
(Action: NGRI)
- 2.5.12 To start regional drilling in Bugga area by GSI
Shri Babu Rao, SCCL requested GSI to take up regional drilling in Bugga area.
Dr. Mukherjee, GSI informed that such exploration work would be taken up.
(Action: GSI)
- 2.5.13 Taking up of boreholes on the dip side of Ramagundam and Somagudem-Indaram coal belt.
Shri Babu Rao, SCCL requested to take up few boreholes on the dip side of Ramagundam and Somagudem- Indaram coal belt of GVCF to establish the coal seams up to 1000m depth and also to arrange for CBM studies.
After detailed deliberation it was decided that it might not be possible to take up this programme at present due to already committed work schedule of the XI plan period.
- 2.5.14 2D seismic survey in Rajasthan by NGRI
Shri Kamraj, NLC suggested review of the proposed alignment of the 2D seismic profile line in Chokhla south block of Barmer sector. After prima-facie appraisal of the available data it was suggested that the profile line might be shifted around 500m towards south, keeping the same line length. However the final alignment will be fixed after mutual discussion amongst NGRI, NLC and MECL. **(Action: NGRI, NLC and MECL)**
- 2.5.15 Infilling drilling at 400m grid interval in East of Kurla block needs to be reviewed
NLC proposed that the infilling drilling at 400m-grid interval in east of Kurla block by MECL might be carried out up to the intersection of the lowest lignite seam in each borehole. Keeping in view the available geological data and the deployed resource status of MECL, it was decided that in each borehole drilling would be carried out at least up to 450m depths to intersect the lower most seam. **(Action: MECL)**
- 2.5.16 Seam correlation for Mannargudi NE and SE blocks with that of Mannargudi Central, NW and SW blocks.
After discussion it was decided that a meeting between NLC and MECL might be convened to discuss the issue of co-relation at length for resolving the same.
(Action: NLC & MECL)

2.5.17 Consent of CGM Gujarat to ILRIS officials to access the work of creation of comprehensive locations of various lignite fields of Gujarat.

Shri Kamraj, NLC suggested that in connection with the ILRIS project, CGM Gujarat may be advised to permit NLC to interact with M/s Bhaskaracharya Institute of Geoinformatics and Space Applications, Gandhinagar for getting correct referential integrity maps with database.

CGM, Gujarat agreed to communicate accordingly. **(Action; CGM, Gujarat)**

2.5.18 Modification of boundary of Bhalumuda block, Mand-Raigarh Cf

The revision of the block boundary as proposed by MECL which discussed in the last Core Group meeting has been approved.

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| Bhalumuda block | Already approved | Revised |
| Area | 15 sq km | 18 sq km |
| Drilling | 5500m | 7500m |

(Action MECL)

2.5.19 Formulation of rationalized norm of borehole core logging

Mrs. Choudhury, CIMFR informed that except GSI, CMPDIL and MECL, some other agencies are not following any standardized norm. After discussion it was decided that CIMFR might formulate a rationalized norm of borehole core logging and circulate the same to the concerned agencies.

(Action: CIMFR)

2.5.20 GSI to supply overall sample advice for sectional study

In response to the above mentioned suggestion of CIMFR, Shri Bhattacharya, GSI informed that necessary instructions have already been given to the Projects. He further mentioned that in the initial stage of the exploration it might not be feasible to give such advice. However such advices are communicated during the advance stage of exploration. In this context, both the Member Secretary and Shri Ahmad, CMPDIL requested CIMFR to revive the earlier practice of submitting Technical Report to the Committee for over coming such issue.

(Action: CIMFR)

2.5.21 Procedure of bill raising and payment may be rationalized.

In this context the following suggestions have been made by Mrs. Choudhury, CIMFR.

- 1) Individual data table will be given to GSI without bills, for official record.
- 2) Periodically (annually/half-yearly), consolidated bills will be raised with copies of the results, separately for regional and promotional blocks. Nature of the blocks(Regional/Promotional) is to be given by GSI at the submission of the boreholes

core samples.

3) Since thickness measured in the field site may vary with that noted in CIMFR lab, the latter might be taken as authentic.

4) Any minor difference (up to 1%) in CIMFR billing and GSI observation then necessary corrections might be made by GSI.

5) Logging charges of 1% might be incorporated in billing for both regional and promotional blocks.

6) Individual units of CIMFR will send their respective bills to GSI directly and the payment drafts may also be sent directly to the concerned units of the CIMFR.

(Action: CIMFR & GSI)

2.5.22 Supply of information on status of lignite exploration in Tamil Nadu to CGM, Tamil Nadu.
NLC, agreed to provide the required information. **(Action: NLC)**

2.5.23 Supply of detail block-wise reserve data, including maps, to State agencies
In response to the proposal of CGM, TN, it was informed that resource figures are available in the National Inventory. However, maps cannot be provided without approval of the Ministry.

2.5.24 Proposal to undertake HRS survey by NGRI
It was decided that NGRI would take up HRS survey along the already delineated profile lines at CMPDIL/MoC approved rate for per line- kilometer and for shot holes (to be fixed by open tendering subject to the maximum approved rate). NGRI has been advised to initiate the work. **(Action: NGRI & CMPDIL)**

2.6.0 Concluding Remarks

2.6.1 Considering the views of all the national exploration agencies, the Convener also expressed his deep concern about the delay in forest clearance as well as prevailing disturbing situation in certain areas which are at present the main hindrance for achieving the XI plan commitment within the stipulated period.

He expressed his happiness for such a fruitful and to the point deliberations on all the aspects and thanked all the participants for their deep involvement during the course of discussion

The Meeting ended with Vote of Thanks

LIST OF PARTICIPANTS IN THE 2nd MEETING OF THE COMMITTEE ON ENERGY MINERALS AND RESOURCES (GR. V OF CGPB) HELD ON 10TH DECEMBER, 2009 AT NATURAL ENERGY RESOURCES (MISSION IIB), GSI, KOLKATA.

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| 1. | Shri B.K. Jena, DDG, NEnR, GSI | Convener |
| 2. | Shri G. Mukherji, Director, GSI. | Member Secretary |
| 3. | Shri V.K.S Visen, HOD (Exploration), MECL | Member |
| 4. | Shri Y.S. Babu Rao, Chief of Exploration, SCCL | Member |
| 5. | Shri I.A. Khan, Joint Advisor (coal), Planning Commission | Member Representative |
| 6. | Shri N. Ahmad, GM (Geological Services), CMPDIL | Member Representative |
| 7. | Shri S. Kamraj, Add. Chief Manager, NLC | Member Representative |
| 8. | Dr. T. Seshunarayana, Scientist 'G', NGRI | Member Representative |
| 9. | Shri N. Choudhury, Dy. Director, CIMFR | Member Representative |
| 10. | Smt. S. Chaudhuri, Geologist (Sr.), CHQ, GSI | Member Representative |
| 11. | Shri K. Balsubramanian, Dy. Director, CGM, Tamil Nadu | Member Representative |
| 12. | Shri B.S. Acharya, Dy. Director, DGM, Chhattisgarh | Member Representative |
| 13. | Shri R. Pandey, Geologist, DGM Jharkhand | Member Representative |
| 14. | Shri P.J.Bhavsar, Geologist, CGM, Gujarat | Member Representative |
| 15. | Shri N. Subrahmanyam, Jt Director, DMG, AndhraPradesh | Member Representative |
| 16. | Shri P.K. Bargi, Chief Mining Officer, DMM, West Bengal | Member Representative |
| 17. | Shri A. Roy, Sr. Advisor, DGH | Member Representative |
| 18. | Shri T. Mar Imchen, Geologist, DGM, Nagaland | Member Representative |
| 19. | Shri G.K. Mohapatra, Dy.G.M. RIL | Member Representative |
| 20. | Shri S. Adhikari, Country Manager, Arrow Energy (Ind.) | Permanent Invitee |
| 21. | Dr. B.C Sarkar, HOD (Applied Geology), ISMU | Permanent Invitee |
| 22. | Dr N. Sharma, Director, GMRDS, Gujarat | Invitee |
| 23. | Shri A. Kumar, Geologist, DGM, Jharkhand | Invitee |
| 24. | Shri Y. Prasad, Dy. Director, DMG, AndhraPradesh | Invitee |
| 25. | Dr. S. Mukherjee, Director, GSI. | Invitee |
| 26. | Shri R.N. Patra, Director, GSI. | Invitee |
| 27. | Dr. S. K. Mukhopadhyay, Director, GSI | Invitee |
| 28. | Shri D. Bhattacharya, Director, GSI | Invitee |
| 29. | Shri A. Bandopadhyay, Director, GSI | Invitee |

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| 30. | Shri S. Ramakrishna Setty, Director, GSI | Invitee |
| 31. | Shri S. Shivanna, Director, GSI | Invitee |
| 32. | Shri S. Balakrishnan, Director, GSI | Invitee |
| 33. | Shri S.Y. Katti, Director, GSI | Invitee |
| 34. | Shri N. Subramani, Director, GSI | Invitee |
| 35. | Shri B. B. Swain, Director, GSI | Invitee |
| 36. | Shri B. Das Geophysicist (Sr), GSI | Invitee |
| 37. | Shri S. Dasgupta, Geologist (Sr.), GSI. | Invitee |
| 38. | Shri P.K. Parui, Geologist (Sr.), GSI. | Invitee |
| 39. | Shri S. Gupta, Geologist (Sr.), GSI. | Invitee |
| 40. | Shri D. Chatterjee, Geologist (Sr),GSI | Invitee |
| 41. | Dr. A. Mondal, Geologist (Sr), GSI | Invitee |