

MINUTES OF THE 6TH MEETING OF THE CGPB COMMITTEE -V ON ENERGY MINERALS AND RESOURCES HELD ON 15TH DECEMBER, 2011 AT BIRESHWAR LASKAR CONFERENCE ROOM, NATURAL ENERGY RESOURCES, M-IIB, GSI, KOLKATA.

6.1.0	The 6th Meeting of the CGPB Committee-V on Energy Minerals and Resources was held on 15 th December, 2011 with Dr. S. Mukherjee, Director-in-Charge, Natural Energy Resources (NEnR), M-IIB, GSI, Kolkata as the Convener. The list of participants is appended at Annexure-I.
6.1.1	Welcoming the participants to the meeting, Shri D. Bhattacharya, Member Secretary and Director, Technical Directorate, NEnR, (M-IIB), GSI introduced the new Convener of CGPB Committee-V on Energy Minerals and Resources, Dr. S. Mukherjee, Director-in-Charge, NEnR, M-IIB. He explained the importance of the 6th Meeting of CGPB Committee-V and pointed out that the Meeting is being convened at a crucial juncture of the end of XI Plan and the beginning of XII Plan. As background information, the Member Secretary stated that planning for the XI Plan was initiated during 2006-07 subsequently modified in 2007-08 at the instance of PMO to initiate work in those left over areas from X Plan at first. An area of 2475 sq km was originally planned for coverage during XI Plan. Subsequently programmes were rescheduled after scanning left over areas in 21 coalfields and areas earmarked for CBM exploration by DGH. As such 2791 sq km was set to be covered by exploration during XI Plan period. He pointed out that about 80% of the area coverage could be achieved so far. He has also emphasized that all the exploration agencies are facing similar problems regarding forest clearance as well as local area disturbances which are posing considerable hindrance in achieving targeted result. Member Secretary lauded all exploration agencies for satisfactory performance in achieving drilling targets so far. However, he added that shortfall in achieving drilling meterage must be covered during 1 st year of XII Plan.
6.1.2	Welcoming the members, invitees, special invitees and representatives of different organizations/institutions, Convener Dr. Subimal Mukherjee, Director-in-Charge, Natural Energy Resources, M-IIB, GSI, Kolkata stated that the history of coal exploration in the country could be traced back to more than 160 years when GSI was established with the prime objective of searching for coal. Systematic search for the solid fossil fuel through Regional and Detailed Exploration followed up in the later period and continued, resulting in accumulation of a huge database on the geology of the coalfields and their fossil fuel resources. During the last three decades this Committee constituted of professional experts from different organizations and exploration agencies had been instrumental in formulating, implementing and judiciously monitoring the arduous task of assessment of solid fossil fuel of our country. He expressed his thanks to each member for contributing to the maximum of their ability for this endeavor.

According to Dr. Mukherjee country's energy security depends on comprehensive and critical analysis of the coal resource-base coupled with multi-faceted geological data-set as well as on designing well-defined strategy for exploration and exploitation leading to multi-dimensional utilization of solid fossil fuel directly or in the form of Coal Bed Methane (CBM) or syn-gas. In spite of the shortfall in drilling and coverage of area during XI Plan, continuous exploration efforts in different coalfields by National and State Exploration Agencies has resulted in substantial augmentation of the geological resources of coal and lignite in the country.

XII Five Year Plan on Coal and Lignite exploration has now been finalized through close and active interactions of different member agencies under the aegis of this Committee. To meet the spiraling demand of energy towards sustained economic growth, topmost priority has been accorded involving policy maker, exploration and exploitation agencies in both public and private domains towards: a) coverage of remaining potential coal bearing areas by regional exploration in order to augment the resource base; b) upgrading the confidence level of resource base through detailed exploration; c) enhancing the coal production by adopting modern technology in both open-cast and underground mining and d) generation of baseline geo-scientific data in the course of exploration in view of multi-dimensional exploitation. The Convener hoped that all the concerned members should take sincere efforts from the beginning to cope up with the challenge ahead.

Harnessing the energy from deep-seated coal and lignite resource, exploitation of Coal Bed Methane (CBM) and using techniques like Underground Coal Gasification (UCG) etc. are gradually coming to the forefront in the global perspective. In the present energy scenario, CBM as an alternate and clean source of energy has become our National agenda. Dissemination of scientific information generated by already explored CBM blocks by different agencies would certainly enrich the knowledge base regarding the entire coal bearing package serving as background information for pragmatic planning for future coal exploration and to assess the locked up resources. Alternatively, application of dual mineral policy which has been repeatedly discussed can be seriously considered.

Much of the technically recoverable natural gas is present in unconventional reservoirs like shale beds. Huge thickness with considerable spatial distribution of organic rich shale is found geologically associated with the coal deposits in several basins. These potential source rocks are being exploited in some countries to tap the natural gas resource. Suitable programme for shale gas exploration has been proposed during XII Plan period. Comprehensive geological database available with all exploration agencies may be helpful in this regard.

The Convener also pointed out that the Committee on energy Minerals has the additional responsibility of assessing the geothermal energy potentiality in the country. Activity on search and exploitation of Geothermal Energy is to be intensified

	utilizing the database available to all agencies. He hoped that interactions in the meeting would be much more goal-oriented facilitating informed decision making to supplement a credible resource for the country's energy security. He concluded by sincerely wishing the Meeting a great success.
6.1.3	Appreciating the proactive role of Committee-V, Shri G. Dasgupta, Director, CGPB Secretariat informed that the Base document for XII Plan had already been prepared incorporating materials pertaining to XI Plan, target and work schedule for XII Plan. He said that soft copy pertaining to SOP of M-II had already been uploaded in GSI Portal and hard copies would be dispatched shortly to all members. He concluded by saying that Members of the Committee V must evolve mechanisms for advancement of achievements of the Committee in future.
6.1.4	Shri Naeem Ahmed, GM (Exploration), CMPDIL informed that programmes for XII Plan period had already been finalized. However, he expressed his anguish that the new restructured erstwhile Coal Wing of GSI presently known as Natural Energy Resources (NEnR), M-IIB, GSI might become a hindrance in seamless data flow from GSI to CMPDIL as far as coal and lignite data is concerned. He further pointed out that as a nodal agency, GSI has the pivotal role in maintaining coordination among coal and lignite exploration agencies. He also expressed his serious apprehension regarding the annual updating of National Inventory of Coal and Lignite in the present scenario of restructuring of GSI.
6.1.5	Shri G. Dasgupta, Director, CGPB Secretariat at this point informed that the present restructuring of GSI is based upon Mission-Region hybrid matrix mode of functioning and Mission-IIB (catering to coal and lignite operations) Head Quarters is stationed at Kolkata.
6.1.6	Shri B.N. Prasad, GM (CBM), CMPDIL in his observation suggested round the clock drilling operation for CBM study for effective data generation. He had also opined about setting up of centralized data bank for CBM similar to coal and lignite data repository. It was also told that the coal data should also come from DGH and private agencies where CBM exploration was going on and this would be useful in improving coal and lignite Inventory. Member Secretary informed that at present neither GSI nor MECL would be able to carry out round the clock drilling. However, continuous drilling may be carried out selectively during intersection of coal seams from which CBM data will be collected. Director, CGPB Secretariat indicated that responsibility of creation of centralized CBM data repository would be discussed in the forth coming CGPB Meeting to be held in New Delhi.
6.1.7	In this context Member Secretary requested Dart (Arrow) Energy to send data on coal seam thickness and its depth of occurrence from Tatapani - Ramkola Coalfield where CBM exploration was carried out by them. In response representative of Dart (Arrow) Energy agreed to send the required data.

	(Action: Dart (Arrow) Energy)
6.1.8	NLC informed that lignite exploration in major part of the shallow areas had already been covered by regional exploration and future areas for exploration exist mostly in deeper parts. NLC suggested deployment of deeper capacity drill machines for lignite in the areas where lignite occurs in relatively greater depth. Convener assured that the exploration in such areas would be covered through drilling associated with geophysical and other related techniques.
6.1.9	Member Secretary requested CIMFR to carry out coking property test in respect of some coal samples from Singrauli Coalfield (Sarai East area) to be sent by M-IIB, GSI. CIMFR agreed to do so. (Action: CIMFR)
6.2.0	<u>Follow up action taken report on the decision of the 5th Meeting of the CGPB Committee V</u>
6.2.1	During discussion on Para 5.1.6, on Geothermal energy, representative from ISM replied that the search for involving suitable organization engaged in geothermal related work is continuing. (Action: ISM)
6.2.2	Regarding issue of regional exploration in the CBM awarded areas as per Para 5.1.7, GSI pointed out that based on the availability of coal seam related data from DGH the areas lying beyond the awarded areas may be taken up for further exploration as they may be potential areas for development of coal/lignite. However, the point could not be elaborated further as DGH was not present in the meeting. (Action: DGH, GSI)
6.2.3	During discussion on Para 5.1.8 about dual mineral licenses Director CGPB pointed out that the new MMRD rules has taken care of such policy matters and the issue may be raised and discussed during forthcoming 50 th CGPB meeting. (Action: Member Secretary/NLC)
6.2.4	In course of deliberations as in Para 5.2.2, MECL expressed their inability to commence exploration in NER due to law and order problem. Member Secretary informed that GSI, NER has commenced regional exploration for coal in Singrimari-Sukhchar area of Assam/Meghalaya.
6.2.5	Para 5.2.3 regarding commencement of exploration in Saraipunj area by DGM, Assam, it was informed that MECL and DGM Assam had carried out joint inspection in Saraipunj area for initiation of proposed exploration but due to insurgency problems the programme could not be commenced. DGM Assam also pointed out they had already collaborated with GSI, SU: Assam regarding coal exploration in Singrimari area where technical guidance would be provided by GSI. CMPDIL pointed out that till date CMPDIL had not received any letter from DGM, Assam regarding suspension of work in Saraipunj area to be carried out under promotional scheme. Member Secretary requested DGM, Assam to send the letter immediately.

	(Action: DGM, Assam)
6.2.6	<p>Regarding Para 5.2.4, on non-availability of exploration data from CGM, Gujarat for inclusion in the upgradation of National Inventory, Member Secretary informed that request was again sent to CGM, Gujarat by GSI. The Para in particular concerned submission of data by CGM, Gujarat who was not present in the meeting. The Members of the Committee V requested Member Secretary to request CGM Gujarat once again to interact with the Committee V in this regard. CMPDIL suggested, even after repeated request no data is received from CGM, Gujarat then it should be reflected in the National Inventory on lignite. Regarding problems in sending and receiving data on coal exploration work from different members, Member Secretary requested all members to send the data through electronic mail which assures it's receiving and is also easy to compile. He also pointed out that for at least last two years no data was received from DGM, Maharashtra. Therefore, their resource data could not be included in the National Inventory.</p> <p style="text-align: right;">(Action: CGM, Gujarat/Member Secretary/All Exploration Agencies)</p>
6.2.7	<p>During discussion on Para 5.2.6, the proposal from SCCL about HRSS Survey by NGRI in Godavari Valley Coalfield, regarding modification of rates, CMPDIL informed that the rates are solely governed by MoC and they can only request the MoC regarding timely release of fund for promotional exploration but the hike in rates is solely controlled by MoC.</p> <p style="text-align: right;">(Action: NGRI)</p>
6.2.8	<p>Para 5.2.7, related to finalization of norms of borehole logging, was discussed in detail. CIMFR suggested all exploration agencies need to follow uniform criteria for drill core logging viz., fixing of roof/floor criteria etc. Member Secretary requested CIMFR to once again send the soft copy of the '<i>Norms for borehole coal core logging</i>' to core group members. He had also requested all core group members to look into the matter and form a committee of core group members to discuss about it. The meeting of core group members would be held at CIMFR, Dhanbad, Jharkhand</p> <p style="text-align: right;">(Action: CIMFR / Core Group Members)</p>
6.2.9	<p>During discussion on Para 5.2.8 regarding sharing of data by CMPDIL for preparation of consolidated reports by CIMFR, CMPDIL stated that it would be difficult to share all data. However, the matter would be taken up with the MoC.</p> <p style="text-align: right;">(Action: CMPDIL)</p>
6.2.10	<p>In respect of Para 5.2.9 regarding joint traverses by SCCL & MECL for searching alternative areas for exploration in Godavari Valley Coalfield, both MECL & SCCL informed that alternative areas in Godavari Valley Coalfield were finalized for XII Plan. However, one such block earmarked for XII Plan would be preponed during XI Plan.</p> <p style="text-align: right;">(Action: SCCL & MECL)</p>

6.2.11	<p>During discussion on Para 5.2.12 regarding coal and lignite resource classification, CMPDIL replied that coal resource classification of CIL blocks has been initiated as per UNFC. SCCL commented that the work as per UNFC is yet to be started. NLC opined that all lignite resource would be classified utilizing Geological axis under UNFC system of classification of resource. However, other two axes of UNFC would be applied in conjunction with the Geological axis only for potential blocks. Member Secretary requested all the exploration agencies to cover all the axes for proved reserves.</p> <p style="text-align: right;">(Action: All exploration agencies)</p>
6.2.12	<p>On availability of data on work carried out by DGM, Nagaland as per Para 5.2.16, Member Secretary requested DGM, Nagaland to present their data through Power Point presentation from the next meetings for the benefit of all members of the committee.</p> <p style="text-align: right;">(Action: DGM, Nagaland)</p>
6.2.13	<p>With reference to Para 5.2.20, NLC replied that they are in the process of collecting GSI reports pertaining to ILRIS project.</p>
6.2.14	<p>Regarding issue of enhancement of rates for analysis by CIMFR as per Para 5.2.22, CIMFR replied that MoU with CIL had been signed on 03.12.2011 and rates had been enhanced from 04.12.2011. A copy of the MoU would be sent by CIMFR/ CMPDIL to GSI for further action.</p> <p style="text-align: right;">(Action: CIMFR/CMPDIL)</p>
6.2.15	<p>During discussion on part of Para 5.5.3 on National Inventory, CMPDIL informed that a letter would be sent to Public Sector undertaking engaged in coal exploration to classify coal resources strictly adhering to category-wise, depth-wise and grade-wise norm for inclusion of their resources in the National Inventory. MoC would be requested to advise all private-block allottees in this respect.</p> <p style="text-align: right;">(Action: CMPDIL)</p>
6.2.16	<p>Regarding approval of alternate area of exploration in Godavari Valley Coalfield as contained in Para 5.5.12, SCCL stated that MECL has deployed drills in Repallivada block, located at the southeastern part of Goleti, Adilabad district, Andhra Pradesh. The item is concluded.</p>
6.2.17	<p>During discussion on Para 5.5.13 regarding taking up deep drilling blocks in Godavari Valley Coalfield, both GSI and MECL informed that drilling at deeper level would be taken up on availability of deeper capacity machines.</p> <p style="text-align: right;">(Action: GSI & MECL)</p>
6.2.18	<p>Regarding the issue of sharing digital slim hole data as per Para 5.5.15 both NLC and MECL are working in tandem.</p>
6.2.19	<p>Regarding revision of Rates for Promotional Exploration of Coal and Lignite as per Para 5.5.19, CMPDIL replied that fresh data on drilling cost to be received would be reviewed and due action would be initiated. Fresh data on drilling cost would be</p>

	<p>supplied by GSI to CMPDIL.</p> <p style="text-align: right;">(Action: GSI/CMPDIL)</p>
6.2.20	<p>Para 5.5.21 regarding Rationalized Norm of borehole core logging was discussed in conjunction with Para 5.2.7 and detailed in Para 6.2.8 of the present Minutes.</p>
6.2.21	<p>Para 5.5.23 regarding Basic Geological Information was taken up for discussion along with Para 5.2.8 and reflected in Para 6.2.9 of the present Minutes.</p>
6.3.0	<p><u>Confirmation of the minutes of the 5th Meeting of the Committee V on Energy Minerals & Resources.</u></p> <p>The minutes of the above meeting was confirmed.</p>
6.4.0	<p><u>Review of work:</u></p> <p>Representative of respective agencies presented the achievements and highlights of the work carried out.</p> <p>CMPDIL enquired about presentation of data on borehole cores of the Private parties processed at different units of CIMFR in the supplied tables on Summarised account of work carried out by CIMFR.</p> <p style="text-align: right;">(Action: CIMFR)</p> <p>DGM, Nagaland requested CMPDIL to help them in carrying out chemical analyses of coal cores drilled by them. CMPDIL replied that they would take up the issue of analyzing such coal samples from CSIR laboratory, Jorhat.</p> <p style="text-align: right;">(Action: DGM, Nagaland & CMPDIL)</p> <p>Member representative Dart (Arrow) Energy requested the exploration agencies viz. GSI, MECL, CMPDIL and state DGMs to share the data on coal exploration from virgin areas of different coalfields. Member Secretary pointed out that coal exploration in virgin areas is undertaken only by GSI and CMPDIL. Member representative, Dart (Arrow) Energy also requested GSI and CMPDIL to conduct desorption studies in at least one borehole in every block. GM, CBM Cell, CMPDIL assured to conduct desorption studies and adsorption test in all blocks undertaken by CMPDIL. Member Secretary also requested Dart (Arrow) Energy to share the exploration data from the central part of Tatapani – Ramkola Coalfield with GSI as no data was available with GSI from this part.</p> <p style="text-align: right;">(Action: Dart(Arrow) Energy)</p> <p>GM, CBM Cell, CMPDIL requested to introduce round the clock drilling in the identified boreholes for CBM exploration. Member Secretary informed that in present infrastructure neither GSI nor MECL would be able to strictly follow the norm in case of generalized CBM exploration. However, for commercial CBM exploration the norms provided by DGH need to be followed.</p> <p style="text-align: right;">(All Exploration Agencies)</p>
6.5.0	<p><u>Discussion on XII Plan</u></p> <p>Member Secretary informed the house that XII Plan document has been finalised. New areas have been identified for coal exploration in XII Plan where increase in</p>

	<p>both depth requirement as well as drilling target has been envisaged. All components of XI Five Year Plan are to be incorporated in XII Plan. The new items viz. Shale Gas and 3G HRSS Survey has been proposed to be introduced in XII Plan. In XII Plan 1.05 lakh metre drilling for regional coal exploration is stipulated which may increase 5.78 billion tonne (hereafter b.t.) targeted resource. Promotional and regional exploration for both coal and lignite will involve 5.85 lakh metre drilling over an area of 1429 sq km and 5598 sq km respectively which will result in creation of possible coal and lignite resource to the tune of 22.42 b.t. and 5.6 b.t. respectively.</p> <p>In detailed drilling for coal, 54.46 lakh metre is slated for drilling by CMPDIL and its associated agencies over 200 blocks to upgrade 77 b.t. of coal resources. For detailed drilling in case of lignite exploration 85000m of drilling target is envisaged in 9 blocks to upgrade 0.5 b.t. lignite resources. CMPDIL informed that in recent years, they have replaced 22 drilling machines with new drills. Four of them are Hydrostatic rigs. It is also informed to the house that 60 boreholes are earmarked for CBM studies in different coalfields and 25 boreholes are selected for Shale gas studies. For 2D and 3D HRSS study of coal and lignite 150 line km and 50 line km has been fixed respectively. Surface geophysical studies and environmental studies of XI Plan are to be continued in XII Plan.</p> <p>Director, CGPB requested the members to procure deeper capacity drill machines under modernization scheme.</p> <p>GSI informed the house that in 11 coalfields, 25 blocks for regional and 21 blocks for promotional exploration are earmarked for XII Plan. For lignite exploration 3 promotional blocks in Rajasthan and 4 in Tamil Nadu are earmarked for exploration during XII Plan. Apart from these, two blocks are earmarked for lignite exploration in Raniganj Coal Field also.</p>
<p>6.6.0</p>	<p><u>Discussion on Agenda Items.</u></p> <p>Member Secretary initiated discussion on Agenda Items by requesting all Members present to go through the list of Agenda Items placed before the Committee.</p>
<p><i>Agenda 1</i></p>	<p><u>3D Seismic Survey by NGRI</u></p> <p><i>A provision of 50 line km of 3D Seismic Survey by NGRI has been kept in XII Plan document. The modalities of carrying out this survey need to be discussed for proper understanding of the technology for its implementation in coal and lignite exploration with the involvement of all the implementing agencies for Promotional Exploration.</i></p> <p style="text-align: right;"><i>(Suggestion: CMPDIL)</i></p>
<p>6.6.1</p>	<p>Member Secretary pointed out the absence of NGRI. A letter would be sent to NGRI for submitting the necessary information in this respect.</p> <p style="text-align: right;">(Action: Member Secretary)</p>

Agenda 2	<p><u>2D Seismic Survey by NGRI</u></p> <p><i>The results of 2D Seismic Survey undertaken by NGRI for lignite exploration in the states of Rajasthan and Tamil Nadu may be discussed for the benefit of all the implementing agencies and future planning of such surveys.</i></p> <p style="text-align: right;"><i>(Suggestion: CMPDIL)</i></p>
6.6.2	<p>Member Secretary pointed out the absence of NGRI. A letter would be sent to NGRI for submitting the necessary information in this respect.</p> <p style="text-align: right;">(Action: Member Secretary)</p>
Agenda 3	<p><u>Shale Gas study.</u></p> <p><i>Drawing of shale samples for preparation of data package for shale gas blocks and R&D project on assessment of prospect of Shale Gas".</i></p> <p style="text-align: right;"><i>(Suggestion: CMPDIL)</i></p>
6.6.3	<p>CMPDIL requested GSI to collect shale sample from Sohagpur Coalfield required for shale gas study for which one person from CMPDIL would be sent to GSI Camp, Sohagpur. Member Secretary advised CMPDIL to submit the request well in advance to communicate this matter to M-IIB, CRO, GSI, Nagpur. CMPDIL also informed the house that the required tests for Shale Gas would be undertaken by CMPDIL in their own capacity, In this context, CMPDIL also informed that an Adsorption Isotherm lab has been set up which may be utilized by exploration agencies. GSI expressed its desire to send samples for analysis of adsorption isotherm to this laboratory and for Permeability study to CIMFR lab.</p> <p style="text-align: right;">(Action: CMPDIL/All Exploration Agencies)</p>
Agenda 4	<p><u>New Rate Chart for F.Y. 2011-2012</u></p> <p><i>CMPDI is being requested to initiate formulation of new rate chart for the period F.Y.2011-2012 In absence of latest rate chart progress in raising bills is affected.</i></p> <p style="text-align: right;"><i>(Suggestion: GSI)</i></p>
6.6.4	<p>The new rate chart for the F.Y. 2011-2012 has since been received by GSI and bills are being raised accordingly. The item is concluded.</p>
Agenda 5	<p><u>Pertaining to National Inventory.</u></p> <p><i>i) To prepare stratigraphy-wise categorized Inventory of coal resource. All concerned parties are requested to send their resources accordingly; and</i></p> <p><i>ii) To show on maps the total mined out areas; CMPDI and SCCL may supply the maps of the mined out areas by locating them on the coalfield maps prepared jointly by GSI, CMPDI and MECL & SCCL in December, 2007.</i></p> <p style="text-align: right;"><i>(Suggestion: GSI)</i></p>
6.6.5	<p>i) To incorporate in National Inventory, the names of the geological coal bearing formations viz. Raniganj and Barakar must be informed to GSI for assessment of proper resource potential.</p> <p>ii) For inclusion of mined out data in National Inventory, Member Secretary suggested that CMPDIL may initiate the procedure from small coalfield viz.</p>

	<p>Sendurgarh. GM (Exploration). CMPDIL pointed out the importance of mined out data from which the actual picture and future mineable area could be known and agreed to sending the mined out data in future correspondence.</p> <p style="text-align: right;">(Action: All exploration Agencies/CMPDIL)</p>
Agenda 6	<p><u>CBM Study</u></p> <p><i>i) Adsorption isotherm and Permeability study of coal core samples to be generated during CBM study in XII Plan period are proposed to be outsourced from CMPDIL, Ranchi.</i></p> <p><i>ii) Band by band chemical analysis of coal core samples for Permeability study is also proposed to be carried out by CMPDIL, Ranchi.</i></p> <p><i>iii) CBM study in 11 boreholes under phase-II was scheduled to be completed by Sept, 2011. Till Sept, 2011 CBM study in 8 boreholes has been completed and the same in remaining 3 boreholes is likely to be completed by March, 2012.</i></p> <p><i>iv) All regional coal seams are not intersected in the borehole IBKH-1 of Khariaparha block. Hence, the borehole IBKH-1 has been replaced by IBKH-3.</i></p> <p><i>v) CBM study to be carried out in Vijaynagar–Giddhi block of Tatapani-Ramkola coalfield instead of Reonti (West) block of same coalfield.</i></p> <p style="text-align: right;"><i>(Suggestion: GSI)</i></p>
6.6.6	<p>i) & ii) GSI will be sending samples for analysis of adsorption isotherm to CMPDIL laboratory, Ranchi. However, for Permeability study coal samples would be sent to CIMFR lab.</p> <p>iii) ,iv) & v) are being approved by the Committee</p> <p style="text-align: right;">(Action: GSI/CMPDIL/CIMFR)</p>
Agenda 7	<p><u>Ratification</u></p> <p><i>i) <u>Time Extension:</u></i> <i>Proposal for extension of time schedule for six months i.e. upto Sept 2012, for the completion of Khariaparha block, Ib-River Coalfield, Jharsuguda district, Orissa</i></p> <p><i>ii) <u>Reduction of target in geophysical logging in Khariaparha block:</u></i> <i>Geophysical logging could not be done in borehole no. IBHK-3, Khariaparha block. It is requested to reduce the geophysical logging target to 2200m instead of 2750m as proposed earlier.</i></p> <p><i>iii) <u>Borehole spacing in Nuagaon North block :</u></i> <i>Since, part of the block is inaccessible due to terrain condition and thick forest, exploration by drilling is limited to accessible area only. As such the spacing of boreholes has been proposed to reduce (1000m – 1800m) to accommodate the drilling target. Therefore, ‘Regional exploration’ (G 3 stage) for coal investigation instead of ‘scout drilling’ may be permitted.</i></p>

	<p>iv) <u>Borehole geophysical logging in Nuagaon North block :</u></p> <p><i>Due to poor accessibility, geophysical logging can reach only to selective borehole locations. So far, only 438.00m geophysical logging has been completed in one borehole. Keeping the above constraints in view, target of geophysical logging may be reduced to 2500m instead of proposed 5500m.</i></p> <p>v) <u>Borehole geophysical logging in Korara-Danara Sector :</u></p> <p><i>Out of the four boreholes drilled so far, geophysical logging of 685.00m has been completed in two boreholes. Since, no coal seam has been intersected in this block, target of geophysical logging may be reduced to 1000m instead of 1650m as proposed earlier.</i></p> <p style="text-align: right;"><i>(Suggestion: GSI)</i></p>
6.6.7	<p>i) to v) are being ratified by the Committee</p> <p style="text-align: right;">(Action: GSI)</p>
<i>Agenda 8</i>	<p><u>Revision of Rates for Promotional Exploration of Coal & Lignite</u></p> <p><i>In different meetings of the CGPB Committee MECL has requested to revise prevalent rates of different components of exploration programme under promotional funding. GSI & MECL had submitted the proposals for revision of rates for promotional exploration in respect of coal & lignite, based on the actual cost of exploration in 2009.</i></p> <p><i>CMPDIL vide letter No. CMPDI/DG/532A/1173 dated 1.12.2011 requested MECL to submit detailed break up of cost of all the activities being undertaken under promotional exploration. Accordingly MECL has submitted the detailed break up to CMPDIL vide letter No. MECL/EXPL/CMPDIL/Prom. Prog./2011/673 dated 5.12.2011</i></p> <p><i>Due to increase in input cost on account of implementation of Revision of Pay Structure as well as hike in POL and spares cost, MECL is incurring financial losses in lignite as well as coal exploration projects under Promotional Exploration programme.</i></p> <p><i>In view of the above, committee is requested to do the needful for revision of rates for Exploration activities under Promotional Programme at the earliest .</i></p> <p style="text-align: right;"><i>(Suggestion: MECL)</i></p>
6.6.8	<p>Replying to MECL suggestion, CMPDIL requested all exploration agencies to send their drilling cost of exploration per metre for coal and lignite under promotional exploration scheme.</p> <p style="text-align: right;">(Action: All exploration Agencies/CMPDIL)</p>
<i>Agenda 9</i>	<p><u>Regarding concluding exploration and sub blocking of Kurla East Block for convenience of Geological Report preparation</u></p> <p><i>Exploration in Kurla East Block commenced on 7.3.2005 and initially bore holes were proposed at 800 m grid interval in 56 sq km area. Subsequently, based on the</i></p>

	<p>results obtained the area was extended and infilling bore holes at 400 m grid interval were proposed in 64 sq km area.</p> <p>Till November 2011 a total of 62185 m of drilling in 162 bore holes has been carried out. However, 11 boreholes proposed at 800 m grid interval in South Eastern part of the block, where lignite occurrence is expected in depth range 470 m to 550 m are left as the depth range is beyond the capacity of drills deployed in the block.</p> <p>In the 2nd meeting of the CGPB Committe V it was decided that the bore holes in Kurla East Block would be drilled up to 450 m depth.</p> <p>In view of the above it is proposed to conclude the exploration in Kurla East Block. Further, for convenience of Geological Report preparation the block may be divided into two sub blocks viz. Kurla East North Block and Kurla East South Block.</p> <p style="text-align: right;">(Suggestion: MECL)</p>
<p>6.6.9</p>	<p>NLC insisted that in view of the decision taken in the core group meeting held at NLC's office, Barsingshar on 1st October 2008 and NLC's comments furnished to the Member Secretary vide letter dated 17.08.2011, MECL might be advised to take up drilling in the left out borehole points proposed earlier by MECL especially in the eastern part of East of Kurla block. NLC also suggested that if possible, high capacity drilling rigs deployed in areas for coal exploration by MECL could be diverted to this block to take up drilling in deeper part of the block.</p> <p>Member Secretary advised MECL to complete the Lignite exploration in the eastern side of Kurla East Block in Rajasthan and to submit the report in stipulated time. Director CGPB Secretariat and Member Secretary further advised MECL to divide the lignite block in Rajasthan in to two sub-blocks northern and southern and to submit the geological report accordingly. Committee also advised MECL to leave out the area with greater depth for XII Plan and to cover it by deploying deeper capacity drill machines.</p> <p style="text-align: right;">(Action: MECL)</p>
<p>Agenda 10</p>	<p><u>Approval for taking up Exploration in Bhurtiya Block.</u></p> <p><i>Based on the exploration results obtained in Mangne-Ki-Dhani Block, Barmer Sector, MECL had submitted a proposal for 7000 m of drilling in Bhurtiya Block (Gap area between Mangne-Ki-Dhani – Chawa and Kawas gravity blocks) vide letter No.MECL/EXP/FII/G-05/CGPB-Comm-V/10/253 dated 1.6.2011. This block is proposed in XIIth Plan Programme. It is requested that the proposal may please be approved so that MECL resource presently deployed in Kurla East Block can be diverted to Bhurtiya block, where the lignite occurrence is expected to be at comparatively shallower depth.</i></p> <p><u>Approval for exploration in Dorli Block, Godavari Valley Coalfield, District Adilabad, Andhra Pradesh.</u></p> <p><i>Total 24000 m of drilling was identified in Lingala-Gundala block, Godavari Valley</i></p>

	<p>Coalfield during XIth Plan, however due to Forest as well as law and order problem MECL could not take up the block. SCCL had suggested taking up exploration in Repallivada Block (S.E. Part of Goleti Adilabad District) and North Western part of Dorli, Adilabad District (Block-I & Block-II) in place of Lingala Gundala Block.</p> <p>Accordingly MECL had submitted proposal for 10400 m drilling in Repallivada Block, Godavari Valley Coalfield (Khaarigaura-Belampalli Coal Belt) district Adilabad, Andhra Pradesh vide letter No.MECL/EXP/Fil/G-05/CGPB-Committee-/10/456 dated 3.8.2011. The approval for the same from Member Secretary has been received vide letter No.G-851/NEnR(M-IIB)/Com-V/2010/30 dated 9.8.2011.</p> <p>The proposal for exploration of coal in North West Dorli Block, Godavari Valley Coalfield, district Adilabad, Andhra Pradesh has been submitted vide letter No.MECL/Expl/Fil/CGPB/2011/635 dated 15.11.2011. The approval for the same is awaited.</p> <p>Recently SCCL carried out Geological Mapping in the NW continuity of Dorli Sector-II mining block and coal out crops has been noticed in the Peddvagu near Chintaguda village. In the light of the above observations SCCL has requested MECL vide letter No.CRP/EXP/B-48/1269 dated 18.11.2011 to divert one rig from Repallivada block to block-II of North West continuity of Dorli to take up a few scout boreholes which will help to identify the liner extension of the coal bearing area. Committee is requested to accord necessary permission/approval to take up a few scout boreholes in the area.</p> <p style="text-align: right;">(Suggestion: MECL)</p>
6.6.10	<p>Committee accorded permission for preponment of coal exploration in Dorli and Bhurtiya blocks, earmarked for XII Plan, during XI Plan.</p> <p style="text-align: right;">(Action: MECL)</p>
Agenda 11	<p><u>Diversions of drill rig</u></p> <p>During the course of geological mapping by SCCL in the NW continuity of Dorli Sector-II mining block (Proposed Block-II of NW continuity of Dorli). Coal outcrops are noticed in the Peddavagu near Chintaguda village. Further south western corner along the vagu, near Venkatapur village, clay zones are noticed under the Deccan traps.</p> <p>As the above programme was already approved by the CGPB committee-V (Para - 5.5.12), M/s MECL is requested to divert one rig from Repallivada block to Block-II of NW continuity of Dorli to take up a few scout boreholes. This will help to identify the linear extension of the coal bearing area.</p> <p style="text-align: right;">(Suggestion: SCCL)</p>
6.6.11	<p>Committee accorded permission for diversion of drill rig from Repallivada block to Block-II of NW continuity of Dorli to take up a few scout boreholes.</p> <p style="text-align: right;">(Action: SCCL/MECL)</p>

Agenda 12	<p><u>HRS surveys</u></p> <p><i>To expedite taking up of HRS surveys in the identified blocks of GVCF by NGRI, Hyderabad.</i></p> <p style="text-align: right;"><i>(Suggestion: SCCL)</i></p>
6.6.12	<p>The item was not discussed as NGRI was not present. Convener requested Member Secretary to write a letter to NGRI requesting to intimate the status of the progress of work in this regard.</p> <p style="text-align: right;">(Action: Member Secretary/NGRI)</p>
Agenda 13	<p><u>Bulk Density Test for Lignite Samples:</u></p> <p><i>The Bulk Density test has not been included in the list of item wise rates of coal analyses notified by the CMPDIL based on the MOU between CMPDIL & CIMFR. Hence CMPDIL has disallowed the payment for bulk analysis test done by NLC at Neyveli for the GSI lignite samples. The bulk density test is important for lignite samples as it is a vital input data for reserves estimation.</i></p> <p><i>Hence it is requested that Bulk Density test may be included in list and rate may be notified for reimbursing the NLC's claim for the GSI lignite samples as well as for taking up the work in future.</i></p> <p style="text-align: right;"><i>(Suggestion: NLC)</i></p>
6.6.13	<p>Member Secretary advised NLC to submit the rate for density test as it was not included in present rate chart received from CMPDIL. He further suggested NLC to discuss the issue with CMPDIL also.</p> <p style="text-align: right;">(Action: NLC/CMPDIL)</p>
Agenda 14	<p><u>Submission of Promotional Exploration Lignite reports with softcopy:</u></p> <p><i>Promotional Exploration for lignite is being carried out by MECL and GSI in various states. It is in practice that a copy of the Geological Report of the Promotional Lignite Exploration is being given to NLC as NLC being the nodal agency for promotional lignite exploration and Integrated Lignite Resource Information System (ILRIS). More blocks have been explored in 11th Plan period and also proposed in 12th Plan period for lignite. The reports need to be converted to softcopy for creation of database in ILRIS project, which is duplication of work. Since softcopy is available with exploration agencies, the softcopy could be submitted along with hardcopy in order to minimize the time and cost.</i></p> <p><i>Therefore, it is requested MECL and GSI to provide an editable soft copy of the Promotional Exploration Geological Report along with hard copy.</i></p> <p style="text-align: right;"><i>(Suggestion: NLC)</i></p>
6.6.14	<p>GSI expressed the problem to hand over the soft copy of GSI's report on regional exploration for lignite carried out under promotional scheme to NLC as these reports are the sole property of CMPDIL. Member Secretary advised NLC to sort out the problem through bilateral meeting with CMPDIL.</p> <p style="text-align: right;">(Action: NLC/CMPDIL)</p>

<p>Agenda 15</p>	<p><u>2D HRS Survey in Andhra Pradesh:</u></p> <p><i>The open tender process is initiated for 3rd time to outsource the shothole drilling and related job services for the proposed 31 LKM of 2D HRS Survey work in AP state and is in final stages. Heavy compensation is claimed by the contractors due to insurgency problems in survey areas. Hence, special permission may please be granted for making this kind of payments to the contractors.</i></p> <p style="text-align: right;"><i>(Suggestion: NGRI)</i></p>
<p>6.6.15</p>	<p>Member Secretary informed that the Committee is not empowered to pay the compensation to the contractors. However, Committee suggested alternate area might be identified to make up the shortfall in the target.</p> <p style="text-align: right;">(Action: NGRI)</p>
<p>Agenda 16</p>	<p><u>Rates for HRS Survey</u></p> <p><i>The rates quoted for shot hole drilling of 31 LKM are higher than the rates approved by the CGPB Committee. Therefore, it is requested that the lowest rate quoted by the contractor in the tender may please be approved by the CGPB/CMPDI authorities. Hence, necessary approvals may be given to take up the work in AP immediately.</i></p> <p style="text-align: right;"><i>(Suggestion: NGRI)</i></p>
<p>6.6.16</p>	<p>The issue was not discussed as NGRI was not present in the Meeting.</p> <p style="text-align: right;">(Action: NGRI)</p>
<p>Agenda 17</p>	<p><u>Approval of alternate seismic lines in Godavari Valley Coalfield</u></p> <p><i>The proposed seismic lines are almost falling on the reserve forest area. Hence, permission may please be granted to shift the seismic lines, which are falling in the reserve forest area to non reserve forest areas. The shift of these lines will be done in consultation with the SCCL officials.</i></p> <p style="text-align: right;"><i>(Suggestion: NGRI)</i></p>
<p>6.6.17</p>	<p>Committee suggested that NGRI might be requested to send the data generated so far for further discussion and be present in such Meeting.</p> <p style="text-align: right;">(Action: Member secretary/NGRI)</p>
<p>6.7.0</p>	<p><u>Concluding Remarks:</u></p> <p>Member Secretary requested all members to send data through e mail well in advance. He further requested Maharashtra DGM to send data pertaining to their achievement and resource generated.</p> <p>Director, CGPB Secretariat in his concluding remarks requested DGM of different North Eastern states to send their representative to Kuju Training Camp of GSI Training Institute. There would be no course fee for state DGMs. In order to capacity build up of the Northeastern state DGMs, GSI will bear TA/DA of their representatives also for attending training courses in GSI Training Institutes. He had also pointed out the poor progress in drilling in Godavari Valley Coalfield by GSI and hoped that such problems would be solved in near future. He also requested SCCL</p>

and NLC to follow the UNFC code of classification of their reserve estimate as CMPDIL had already initiated following the same code. Director, CGPB Secretariat also pointed out the problem NTPC is facing in case of coal exploration in Jharkhand as they need more coal for meeting up their requirement. He also drew attention of CIMFR to minimise backlog of band-by-band analysis of coal.

In response, CIMFR praised the initiative of CMPDIL in form of financial assistance to develop the infrastructure of CIMFR laboratories which would be of immense help in completing band-by-band analysis of coal at a faster pace. CIMFR also assured that in near future the problem of timely analysis of coal would be eradicated in the light of MoU signed between the CIMFR and CIL for enhancement of rate for chemical analysis.

Convener, CGPB Committee V stressed on to find ways to overcome the forest related problems as well as to acquire deeper and improved drilling machines to intersect coal at deeper level.

CMPDIL during summing up the proceedings requested all the members to accept the challenge of achieving the target in coal exploration during XII Plan. CMPDIL also suggested if any organization fails to send data on their resource generation, it may be reflected in the National Inventory. CMPDIL proposed incorporating some coal data locally generated in Rajmahal Coalfield in the National Inventory.

Answering to this Member Secretary said that National Inventory is based on exploration data in peninsular India and mapping data from extra peninsular India. Data included in National Inventory should have some reliability, authenticity, based on mapping etc. Coal data generated from CBM awarded area may however, be incorporated in the National Inventory.

MECL assured to improve their performance by acquiring higher capacity drill machines.

DGM Nagaland requested the Committee to enhance their drilling capacity by procurement of new drilling machine. Director, CGPB Secretariat advised them to apply to the concerned authority.

DGM Jharkhand expressed their gratitude to GSI for rendering help and co-operation during coal exploration.

Dart (Arrow) Energy requested CBM data from GSI. Replying to this Member Secretary informed that the data generated so far is not encouraging. He reiterated the request to share coal data with GSI and CMPDIL where they are carrying out CBM exploration, especially that of Tatapani - Ramkola Coalfield.

The meeting ended with vote of thanks.

ANNEXURE-I

LIST OF PARTICIPANTS ATTENDING 6TH MEETING OF THE CGPB COMMITTEE -V ON ENERGY MINERALS AND RESOURCES HELD ON 15TH DECEMBER, 2011 AT BIRESHWAR LASKAR CONFERENCE ROOM, NATURAL ENERGY RESOURCES (NEnR), M-IIB, GSI, KOLKATA.

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