F. No. 23011/69/2013 - CPD Government of India Ministry of Coal

New Delhi, Dated the 29th November, 2013

#### Office Memorandum

Subject:-First meeting of the IMC to formulate a policy on coal/rejects allocation for washery reject based power plants scheduled for 5<sup>th</sup> December, 2013.

The undersigned is directed to refer to Ministry of Coal's OM of even No. dated 20.11, 2013 (copy enclosed) and to say that the aforesaid meeting has been postponed and will now be held on 6th December, 2013 at 03.00 P.M. in the Chamber of Additional Secretary, Ministry of Coal, Room No. 330-A wing, Shastri Bhawan, New Delhi

- 2. Representatives of the Ministries/Deptts concerned are requested to make it convenient to attend the aforesaid meeting.
- 3. Background notes on the issue given by CIL and MOP are enclosed for information.

Encl: as above

(S. Bhattacharva)

Under Secretary to the Government of India

- The Secretary, Ministry of Environment and Forest, CGO Complex, Lodi Road, New Delhi.
- 2. Joint Secretary, Ministry of Power, Shram Shakti Bhawan, New Delhi
- 3. Adviser, Planning Commission, Yojana Bhawan, New Delhi
- 4. Coal Controller Organization, 1 Council House Street, Kolkata
- Director (Marketing), CIL, 15, Park Street, Kolkata
- Director (Technical), CIL, 10 NS Road, Kolkata

## Copies also to:

- 1. Sr. PPS to Secretary, Ministry of Coal
- 2. Sr. PPS to Additional Secretary, Ministry of Coal
- 3. PS to Joint Secretary(C), Ministry of Coal
- 4. PS to Joint Secretary (LA), Ministry of Coal
- 5. Advisor (Project) Ministry of Coal
- 6. PA to Deputy Secretary(CPD).

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(S. Bhattacharya) Under Secretary to the Government of India

Copy to: Director, NIC Ministry of Coal with the request to place the same on the website of this Ministry.

Director(NIC), Ministry of Coal

F. No. 23011/69/2013 -CPD Government of India Ministry of Coal

New Delhi, Dated the 20th November, 2013

#### Office Memorandum

Subject:- First meeting of the IMC to formulate a policy on coal/rejects allocation for washery reject based power plants-reg.

The undersigned is directed to refer to Ministry of Coal's OM of even No. dated 17.06.2013 (copy enclosed) and to inform that the first meeting of the IMC to formulate a policy on coal/rejects allocation for washery reject based power plants will be held on 5<sup>th</sup> December, 2013 at 11.00 A.M. Agenda/venue of the meeting will be circulated separately.

Encl: as above

(S. Bhattacharya)
Under Secretary to the Government of India

- 1. Joint Secretary, Ministry of Power, Shram Shakti Bhawan, New Delhi
- 2. Adviser, Planning Commission, Yojana Bhawan, New Delhi
- 3. Coal Controller Organization, 1 Council House Street, Kolkata
- 4. Director (Marketing), CIL, 15, Park Street, Kolkata
- 5. Director (Technical), CIL, 10 NS Road, Kolkata

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- 1. Sr. PPS to Secretary, Ministry of Coal
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- 3. PS to Joint Secretary(C), Ministry of Coal
- 4. PS to Joint Secretary (LA), Ministry of Coal
- 5. Advisor (Project) Ministry of Coal
- 6. PA to Deputy Secretary(CPD).

(S. Bhattacharya)

Under Secretary to the Government of India

Copy also to: - GM, CIL, scope Mirar, Hew Delhi



#### No. 23011/69/2013-CPi) Government of India Ministry of Coal

New Deini Dated the 17" June 2013

## Office Memorandum

Subject:- Constitution of a Committee to formulate a policy on coal/rejects allocation for washery reject based power plants.

The undersigned is directed to refer to the above mentioned subject and to say that in accordance with the decision taken in the meeting of the Standing Linkage Committee (Long Term) for Power held on 07 01.2013, it has been decided to formulate a policy for allocation of coal/ washery rejects generation by CIL for washery reject based power plants. The Committee will have the following composition.

(1) Additional Secretary, Ministry of Opal	Chairparso
(2) Joint Secretary (C). Ministry of Coal	Member 300
(3) Joint Secretary (LA), Ministry of Coal	Member
(4) Advisor (Project), Ministry of Coal	Member
(5) Representative of Ministry of Power	Member
6 Representative of Planning Commission	- Member
more was used to CCO	
(a) Director (Marketing), Charling a Litt	
9) Director (Technical). Coal India Ltd.	Member

in finalizing their recommendations

- 3 The terms of reference of the Committee would be as under-
- (i) To assess actual coal gemand of washery rejects based power plants and to formulate suitable guidelines for issue of long term coal linkage for these power plants, keeping in view the overall availability position.
- (ii) To assess the actual rejects generated from CIL washeries and to formulate suitable guidelines for supply of rejects on long term basis from CIL washeries
- 4. You are requested to nominate a senior level officer, not below the rank of Joint Secretary, to attend the meetings of the Inter-Ministerial Committee.

(S Bhatlacharya)

to the service of the age of them

Under Secretary to the Government of India

- Joint Secretary, Ministry of Power, Shram Shakti Bhawan, New Delhi
- 2. Advisor, Planning Commission, Yolana Bhawa, New Delhi
- 3 Coal Controller Organisation
- Director (Marketing), Coal India Limited, Kolkata
- 5 Director (Technical), Coal India Limited, Kolketa

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## Copies also to:

V)

Sr. PPS to Secretary, Ministry of Coal

iv)

PPS to Secretary, Ministry of Coal PS to Joint Secretary (C), Ministry of Coal PS to Joint Secretary (LA), Ministry of Coal PS to Joint Secretary (LA), Ministry of Coal Advisor (Project), Ministry of Coal Ministry of Coal PS (15/14/13)

Under Secretary to the Government of India

F.No-FU-7/2010-IPC Government of India Ministry of Power Shram Shakti Bhawan, Rafi Marg New Delhi dated / .08.2013 OFFICE MEMORANDUM The undersigned is directed to refer Ministry of Coal's OM No.

Sub:- Issuance of Letters of Assurances for Washery reject based power plants.

23011/69/2013-CPD dated 19.07.2013 on the above mentioned subject and to furnish a background Note on Issuance of Letters of Assurances for Washery reject based power plants.

Enclosure as above

(S. Majumdar)

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Under Secretary to the Govt. of India e-mail- Suman.m@nic.in

Ministry of Coal, (Sh. S. Bhattacharya, Under Secretary) Shastri Bhawan, New Delhi.

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## Issuance of Letter of Assurance for Washery rejects based power plants -Background Note

In the meeting of the SLC (LT) meeting held on 07.01.2013 under item No. 3 (vii) it was recommended as under:

- (i) The demand of Washery rejects based power plant which involves their requirement of coal and was earlier envisaged (though not committed) may be considered by MoC for issue of linkage for which suitable guidelines may be developed in consultation with CIL.
- (ii) MoC may consider issue of linkage for supply of rejects where requested to meet the requirement of reject based power plants. The rejects may be supplied against linkage by the coal companies/CIL under a policy to be put in place by MoC in consultation with CIL.

As per the MoC OM dated 19.07.2013, a committee has been constituted with a view to formulate a policy in respect of above mentioned issues under the Chairmanship of Additional Secretary (Coal). Ministry of Coal has requested Ministry of Power that a background note in the matter along with the suggestions may be sent to them.

2. As per the information available in Ministry of Power, following six washery rejects based power plants are commissioned / under construction which had requested linkage of coal as supplementary fuel.

Sl.No.	Name of Project/Company	Capacity (MW)	Status	
i)	M/s Aryan Coal Benefications Pvt. Ltd. Korba, Chhattisgarh	30	Commissioned in Feb 2007	
ii)	M/s Gupta Energy Pvt. Ltd. Chandrapur, Maharashtra	2x60	Unit 1: Commissioned in Sept 2012 Unit 2: Commissioned in April 2012	
iii)	M/s ACBIL (formerely M/s Aryan Coal Benefications Pvt. Ltd.) Korba, Chhattisgarh	2x135	Unit 1: Commissioned in Dec 2011 Unit 2: Commissioned in June 2012	
iv)	M/s SV Power Pvt. Ltd. Korba, Chhattisgarh	1x63 (earlier 2x50)	Commissioned in Dec 2011	
v)	M/s Vandana Energy & Steel (Pvt.) Ltd. Korba, Chhattisgarh	1x35	Commissioned in Feb 2012	
vi)	M/s Maadurga Thermal Power Co. Ld, Cuttack, Odisha	2 x 30	Expected to be commissioned in the current year 2013-14	

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The washery reject based power plants mentioned at Sl No. i) to v) above were discussed in the SLC (LT) meeting held on 29.01.2010 for allocation of coal as supplementary fuel as recommended by CEA/MOP. The consideration of the above mentioned five projects was deferred for want of discussion paper from CIL. All the units of these five projects have been commissioned. The plant at Serial No. vi) above has been recommended by CEA to MOP along with the projects for 12<sup>th</sup> Plan. As per the status furnished by the IPP, this project is under advance stage of construction and is also expected to be commissioned this year. Govt. of Odisha vide their letter dated 26.5.2012 addressed to Ministry of Coal and copy endorsed to MoP and CEA have also recommended coal linkage to Maadurga Power Project.

## 3. Coal linkage policy for 12th Plan Projects.

Ministry of Power vide OM No. FU-9/2009-IPC dated 21<sup>st</sup> October, 2009 had issued\_policy guidelines for providing coal linkage (Annex-I). These policy guidelines inter-alia stipulated that for Washery rejects the ratio of coal to be considered is 22:78 based on Grade of Coal. Subsequently, MoP vide letter dated 18.03.2011 clarified that in respect of Washery rejects based Power Plants the ratio of coal and rejects of 22:78 with F grade coal would be considered for projects having unit size of 50 MW and above

## Discussion Paper of CIL

The discussion paper prepared by CIL and received in MoP vide letter dated 10.03.11 which was examined in CEA and comments of MoP were sent to MoC on 06.06.2011. The points brought out in the discussion paper and observations of CEA on the same were as given below:

Sl. No.	Points brought out in the discussion paper of CIL	Observations of MoP vide letter dated 06.06.2011
i.	The rejects generated in the washeries operated by Coal India Ltd. (CIL) and subsidiary companies is either used in the captive power plants of the coal companies or sold through e-auction	& rejects generated from coking and non- coking coal washeries and its present utilization. The projected quantities of
ii.	The rejects generated by the private washeries are owned by the allottee companies and the same can be sold by the owner companies to the power plants for which it is suggested by the CIL that a demand supply mechanism may be put in	It is felt that there is need to ensure that these rejects are utilized for power generation and a suitable mechanism for the same is also required to be evolved in the next SLC (LT) meeting. In the meanwhile, CIL may furnish the details of the existing and proposed non-CIL washeries in next 2-

Sl. No.	Points brought out in the discussion paper of CIL	Observations of MoP vide letter dated 06.06.2011
	place under the administrative control of the office of coal controller.	
iii.	Since the rejects have the requisite CV which can be utilized by the CFBC boilers, such power plants should be designed and linked exclusively on rejects. It is also stated that in the event, there is necessity for raw coal to support in exigencies, the same may be sourced from the e-auction	any washery would depend on the quality and washing characteristics of input coal
		b. It has been seen that rejects with GCV as low as around 1000-1200 Kcal/Kg may also get produced from washing process. The feasibility of using such low quality rejects for power generation may require blending with ROM coal.

## 5. Requirement of coal for washery rejects based plants

It was deliberated in the SLC(LT) meeting held on 07.01.2013 that the long term linkage for washery based rejects can however be considered in case such a reject based Power Plants requires it since such rejects are presently being e-auctioned by CIL and not linked to committed supplies. As per the projections of coal availability from indigenous source vis-à-vis coal requirement for thermal power plants, there is a deficit in coal availability even to meet the requirement of projects already given coal linkage and CIL has expressed its inability to supply coal outside the frozen capacity of 60,000 MW for which commitments for coal supplies during the 12<sup>th</sup> plan period have been made and there is a negative coal balance with the coal companies. As such, it may be difficult to accommodate additional coal linkages.

However, the requirement of coal as supplementary fuel for washery reject based plants is small and is estimated to be about 0.55 million tonnes. Considering that the washery reject based plants as mentioned in Para-2 above are already Commissioned /under construction, coal linkage as supplementary fuel may be considered on cost plus basis. CIL may also offer to such plants the coal locked –up in their coal mines due to evacuation constraints on as is where is basis.

The requirement of coal has been worked out considering the ratio of 22:78 of coal and rejects as stipulated in the policy guidelines of MoP. The basis of the proposed ratio and calculation of the coal quantity is given in the Annexure-I.

## Linkage of rejects from coal washeries

CIL in their discussion paper had mentioned that:

- Rejects generated in the washeries operated by CIL and subsidiary companies is either used in Captive Power Plants of the coal companies or are sold through e-auction and
- Rejects generated by the private washeries are owned by the allottees companies and the same can be sold by the owner companies to the power plants.

CIL may furnish the details of the existing and proposed washeries along with the quantity of rejects / middling after accounting for the committed use may be considered for allocation to washery rejects based power plants in the SLC (LT).

The following issues will need to be considered in regard to allocation of coal /rejects to washeries rejects based power plants:

- Pricing of washery rejects need to be evolved.
- Washery rejects to be allocated to those power plants including CPPs which have Fluidized Bed Combustion boilers.
- Washery rejects based power plants which are located within 100 Kms of the coal washeries may be considered for allocation of rejects.
- iv) Coal as supplementary fuel may be supplied if the power plant has tied up for washery rejects of required quantity and the supplementary fuel is necessary as per the design coal of the boiler.

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F.No.FU-9/2009-IPC Government of India Ministry of Power

New Delhi, dated the 21st October, 2009

### OFFICE MEMORANDUM

Sub: Coal linkage policy for 12th plan projects

The undersigned is directed to refer to Ministry of Coal's OM No. 23011/27/2008-CPD dated 26.12.2008 regarding the shelf of 12<sup>th</sup> Plan projects and to say that in view of the shortage of coal and a number of power projects proposed for commissioning during 12<sup>th</sup> Plan awaiting linkage, it has been decided in the Ministry to adopt the following methodology for allocating coal linkage for 12<sup>th</sup> Plan projects:-

## A. Sector wise priority:

Following is the order of priority for allocation of coal linkage :

- Power projects of Central Sector CPSUs, state sector and projects to be bid out by states on tariff based competitive bidding (Case II)
- ii) IPP Projects
- iii) Captive Power Projects .

## B. Prequalification of projects for coal linkage:

- (i) Water allocation should be available to meet the full requirements of the project and a certificate to this effect issued by the competent authority of the State Government must be produced.
- (ii) The proposed project should have clearly identified the location and the area required for setting up of the power project.
- (iii) Report of the State Government about availability of land for project purposes should be produced along with evidence of initiation of process for procurement of land.
- (iv) The developer of the project should furnish the report of the Expert Appraisal Committee of Ministry of Environment & Forests along with Terms of Reference issued by MOEF.
- (v) The project developer meets the financial pre-qualifications as defined in the Standard Bid Document for procurement of power through tariff based competitive bidding (Case-I).

Authenticated copies of financial documents along with supporting affidavit signed by the authorized representative of the Board or the Chief Promoter(s)

of the Project have to be furnished. The promoter shall remain responsible for the genuineness of the documents.

## C. Weightage for priority:

Ministry of Coal will indicate the availability of coal for the 12<sup>th</sup> Plan. 60% percent of available coal would be earmarked for the Central and State sector projects, including the projects based on tariff based competitive bidding (Casell). For State sector projects, coal will be allocated based on the projected demand supply gap of the State.

35% of the coal available will be earmarked for the IPPs and balance 5% will be earmarked for the CPPs. Inter-se priority will apply for each category viz. Central and State Sector projects including those to be bid on tariff based competitive bidding (Case II) by the State Governments and IPPs. Prioritisation will be based on points to be allocated as detailed below:

SI. No.	Parameter	Points	allotted to	Other projects	
		projects fulfilling condition	the	The state of the s	not
1	Projects proposing installation of units with supercritical technology	20		0	
2	Project at pit-head or in State where no major power projects have been planned in the 11 <sup>th</sup> / 12 <sup>th</sup> Plan shelve	20		0	
3	Projects using sea water instead of fresh water*	10		0	
4	Progress of land acquisition **	50			
(i)	>25% <50% land acquired	20}		0	
(ii)	>50% <75% land acquired	30}		0	
(iii)	>75% <100% land acquired	40}		0	
(iv)	100% land acquired	50}		0	
	Total		100		

<sup>\*</sup> Only the IPP projects located within 150 km from the nearest port will be required to meet at least 30% of their coal requirements through import. This is not applicable to SPSUs and CPSUs as Government is already fixing target for import of coal for them

<sup>\*\*</sup> For weightage for progress of land acquisition, the developer shall submit a certificate from the District Collector or the State Revenue Authority or the authorized agency of the State Government such as Industrial Development Corporation. The

responsibility of correctness of the certificate will rest with the developer as it will not be possible for CEA to verify the land records.

D. Captive Power Projects

For CPPs, linkage will be recommended for those who are having capacity more than 10 MW.

Following industries for captive use may be given preference:

Steel Industry

ii. Aluminium industry

iii. Process industries such as cement, textile, sugar etc.

- 2. Cases of linkage for CPPs/IPPs having unit size less than 200 MW will be considered only if equipment are sourced from reputed domestic manufacturers. However, if the equipment are ordered before 24.07.2008 to others, linkage may be considered.
- There will be no domestic linkage to power plants based on imported coal in 12<sup>th</sup> Plan.
- 4. For washery rejects, the ratio of coal and rejects to be considered is 22:78 based on grade of coal. With bio-mass, coal as support fuel up to 15% may be considered.
- This issues with the approval of the competent authority.

(S.Narayanan) Under Secretary to the Govt. of India

Secretary Ministry of Coal Shastri Bhawan New Delhi.

Copy to the Chairperson, Central Electricity Authority, Sewa Bhavan, R.K.Puram, New Delhi with a request to prepare a shelf of 12<sup>th</sup> Plan projects awaiting coal linkage with appropriate marking against those projects.

F.No.FU-7/2010-IPC Government of India Ministry of Power OFFICE MEMORANDUM

New Delhi, dated 6th June, 2011

Sub: Policy on reject based power plants.

Reference Ministry of Coal's OM No.23021/61/2007-CPD dated 10th March. 2011 on the above subject. In this regard detailed comments of Ministry of Power on the discussion paper for extending LoA to reject based power plants forwarded by the Ministry of Coal is sent herewith for further necessary action.

- In this regard it may be recalled that following five projects were considered in the SLC(LT) meeting held on 29.1.10:
- 30 MW power project of M/s Aryan Coal Beneficiations Private Limited, Korba, Chhattisgarh.
- ij 2 x 60 MW power project of M/s. Gupta Energy Private Limited, Chandrapur, Maharashtra
- 2 x 125 MW power project of M/s. Aryan Coal Beneficiations Private Limited, III. Chhattisgarh
- iv. . 2 x 50 MW (revised 1 x 63 MW) power project of M/s. SV Power Private Limited, Korba, Chhattisgarh
- 1 x 35 MW power project of M/s. Vandana Energy & Steel Private Limited, Korba, Chhattisgarh.

Out of these, 'project at S.No.1 i.e. M/s. Aryan Coal Beneficiations Pvt. Ltd. has already been commissioned and remaining four are in advance stage of construction and are likely to be commissioned in the current year. Further one more washery reject based plant (2x30MW) of M/s. Maadurga Thermal Power Company Limited in Cuttack district of Orissa is under construction. This project has already been recommended to MOC alongwith the projects for 12th Plan vide OM No. FU-9/2009-IPC dated 22.12.2010. As per the status furnished by the IPP, this project is also expected to be commissioned this year. Ministry of Coal is again requested to consider coal linkage to all these six washery rejects based power plants as supplementary fuel, as the plants are ready / getting ready.

Encl. as above

Ministry of Coal. (Shri Y.P.Dhingra, Deputy Secretary), Shastri Bhavan, New Delhi.

Director

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## COMMENTS. OF MINISTRY OF POWER ON POLICY ON REJECT BASED POWER PLANTS

- (i) It is stated in the discussion paper that the rejects generated in the washeries operated by Coal India Limited (CIL) and subsidiary companies is either used in the captive power plants of the coal companies or sold through e- auction. CIL may give the total quantity of middling & rejects generated from coking and non- coking coal washeries and its present utilization. The projected quantities of middling/rejects to be generated in the next 2-3 years may also be indicated by the CIL. In view of the shortage in coal supply for power generation, such middling & rejects need to be linked to washery reject based power plants through SLC (LT).
- (ii) It is also stated in the discussion paper that the rejects generated by the private washeries are owned by the allottee companies and the same can be sold by the owner companies to the power plants for which it is suggested by the CIL that a demand supply mechanism may be put in place under the administrative control of the office of coal controller. It is felt that there is need to ensure that these rejects are utilized for power generation and a suitable mechanism for the same is also required to be evolved in the next SLC (LT) meeting. In the meanwhile, CIL may furnish the details of the existing and proposed non-CIL washeries in next 2-3 years alongwith the quantity of rejects and its utilization for consideration of the SLC (LT).
- (iii) It is stated in the discussion paper that since the rejects have the requisite CV which can be utilized by the CFBC boilers, such power plants should be designed and linked exclusively on rejects. It is also stated that in the event, there is necessity for raw coal to support in exigencies, the same may be sourced from the e-auction. In this regard, following observations are made:-
  - (a) The quantity and quality of reject from any washery would depend on the quality and washing characteristics of input coal as well as the washing process employed. It is pertinent to note that the objective of washing would be to have the least quantity of rejects (High washing yield) and minimum heat content in the rejects. The GCV of the rejects may not be necessarily in the range of 1700 to 2000 Kcal/Kg as brought out in the discussion paper.
  - (b) It has been seen that rejects with GCV as low as around 1000-1200 Kcal/Kg may also get produced from washing process. The feasibility of of using such low quality rejects for power generation may require blending with ROM coal.



- (v) As per the projections of coal availability from indigenous source vis-à-vis coal requirement for thermal power plants, there is a deficit in coal availability even to meet the requirement of projects already given coal linkage and which are expected to be commissioning this year. As such, it may be difficult to accommodate additional coal linkages. However, the requirement of coal as supplementary fuel for washery reject based plants is small and is estimated to be about 0.55 million tones. Considering that the above mentioned washery reject based plants are already under construction, coal linkage as supplementary fuel may be considered on cost plus basis.
- (vi) Ministry of Coal may request CIL to come out with the total quantity of washery rejects/middlings being generated/to be generated in the next 2-3 years in the CIL washeries as well as in non-CIL washeries and to discuss in the modalities to ensure that these rejects are utilized for power generation.

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# COAL INDIA LIMITED (Marketing Division)

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CIL/S&M/Ministry/ November, 2013

Shri S Bhattacharya Under Secretary Govt. of India Ministry of Coal New Delhi.

Dear Sir,

Sub: Issuance of Letter of Assurances for washery reject based power plants

This has reference to your letter No.23011/69/2013-CPD dated 24<sup>th</sup> September, 2013 on the above issue. Input from CIL marketing Division is given in the enclosed write-up for further necessary action at your end.

Enclosure: as above

Yours faithfully,

(LK Mishra) General Manager (S&M)

Copy for kind information to: Director (Marketing), CIL

6<sup>th</sup>

Input to formulate a policy for allocation of coal/washery rejects generation by CIL for washery reject based power plants

1. In line with the decision taken in the SLC (LT) meeting held on 7<sup>th</sup> January, 2013 an inter-ministerial committee comprising of representatives from Ministries of Coal and Power, Planning Commission, Coal Controller's Organization and CIL under the Chairmanship of Additional Secretary, MOC has been constituted vide OM No. 23011/69/213-CPD dated 17<sup>th</sup> June, 2013 to formulate a policy for allocation of coal/washery rejects generation by CIL for washery reject based power plants.

#### 2. The TOR of the Committee are as under:

- a) To assess actual coal demand of washery reject based power plants and to formulate suitable guidelines for issue of longterm coal linkage for these power plants, keeping in view the overall availability position
- b) To assess the actual rejects generated from CIL washeries and to formulate suitable guidelines for supply of rejects on long-term basis from CIL washeries
- 3. With regard to the issue of assessing the requirement of coal for washery reject based power plants and formulation of guidelines for issue of long-term coal linkage for these power plants it needs to be appreciated that the residual heat value of rejects can be used for power generation and there will be lesser generation of ash. This would also ensure proper use of carbonaceous matter in coal for power generation.
  - i) GCV of the rejects, which, as per present grade notification could be anything below 2200Kcal/Kg. As per the policy paper for disposal of washery rejects circulated by MOC vide OM No.13011/03/2007-CA-1(Pt) dated 13<sup>th</sup> December, 2011, which was subsequently kept in abeyance, washery product containing more than 65% of ash is to be

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considered as rejects. Thus the reject is essentially defined by the cut-off through which it slips from being declared as coal without any lower limit in case of heat value or higher limit for ash content. For obvious reasons, washeries would always strive for lowering the heat value of the rejects by removing the combustible from the rejects as far as possible.

- ii) Washing of both non-coking and coking coal may lead to generation of rejects. However, the rejects have no metallurgical usage. Therefore, rejects, from usage point of view, should be defined only by the calorific value. As per the grade notification carbonaceous material having GCV of 2200 Kcal/Kg or above is defined as coal. It is therefore, suggested that carbonaceous material generated at the washery only having GCV of less than 2000 Kcal/Kg may be considered as rejects, keeping the in-between range of 2200-2000 Kcal/Kg as transition phase.
- iii) In view of the difficulties explained at point (i) above, it is not possible to assess the coal requirement of washery reject based power plants. MOP/CEA may assess the technology adopted by the reject based power plants to determine whether the plant can be run on washery rejects on stand alone basis. They should also assess up to what extent below 1000Kcal/Kg heat value the reject will remain useable for power generation.
- iv) Since the heat value of the rejects cannot be uniform across all washeries, a table is required to be developed by MOP/CEA for deciding the normative requirement for rejects of different heat value for different capacity of power unit.
- v) On the basis of the recommendation of SLC (LT), which should be source-specific and should also specify the range of heat value of rejects to be used by the power

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plant, the LOA shall be issued for a quantity to be decided on the basis of the table developed by the expert groups at MOP, as explained at point (iv) above.

- vi) Requisite milestones are to be achieved by the power plant for synergy to be established for commissioning of the plant and washery. Once the milestones are achieved by the power station, LOA shall be converted into FSA.
- 4. Following issues need to be considered for assessing the actual rejects generated from washeries and to formulate suitable guidelines for supply of rejects on long-term basis:
  - The issue of disposal of rejects assumes importance as promoters of washeries are required either to declare that the rejects does not contain any polluting material and therefore, can be dumped or if it contains some calorific value are required to mention the disposal plan in the EMP for expediting the necessary EC/FC for construction of washery.
  - of 19.68 MTPA are available with CIL. Out of these eleven, six with capacity of 9.13 MTPA four with capacity of 9.35 MTPA and one with capacity of 1.28 MTPA throughput are working at BCCL, CCL and WCL respectively. So far as non-coking coal is concerned, six washeries with throughput capacity of 19.72 MTPA are presently in operation, out of which two (capacity 3.5 MTPA) are in BCCL, three (capacity 11.72 MTPA) are in CCL and one (capacity 4.50 MTPA) is in NCL, which is a deshaling plant and may not generate any carbonaceous rejects. The washeries of BCCL and CCL are quite old and are working below the rated capacity.
  - iii) CIL has a future plan to set up more washeries on 'Build-Operate-Maintain (BOM) concept, whereas certain capacity will also come through turnkey basis. The non-

coking coal washeries are planned by subsidiary coal companies of CCL, BCCL, ECL, SECL and MCL. BCCL and CCL have also planned some coking coal washeries.

iv) Subsidiary companies of CIL were requested to indicate the actual rejects generated from their own washeries and rejects to be generated in future with the commissioning of washeries. Three companies have provided the following input:

Coal Co	Likely stock of rejects on 31.3. 2013, as indicated by Coal Co.	d in 2012-13 from existing	Rejects to	Dispos al mode	
(1) BCCL		Not indicated. Existing washerie s are now converte d into two product technolog y leading to no generation of rejects	(4) 5.41	rejects in stock as	stated that propose d NLW

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CCL	6.27	0.91	2.5	e- auction for existing rejects	
MCL	Nil	Nil	11.0	Washer ies are yet to be commis sioned	GCV 1000- 2000Kca I/Kg
Total	10.48		18.91		-

- v) It is noteworthy that the average floor price of washery rejects of existing stock from coking coal washeries at BCCL had been Rs.1297.67/ton and average bid price had been Rs.1392.61/ton in 2012-13. As informed by BCCL, the current stock of washery reject conforms to about G-13 grade and therefore, the average floor price has been kept at Rs.1106/ton. In case of CCL, the reserve price of washery reject in 2012-13 had been Rs.1044 for Gidi and Piparwar Washeries, Rs.1260 for Rajrappa, Rs.1416 for Swang, and Rs.1848 for Kedla, Kargali and Kathara washeries. Incidentally the prices of G-11 and below grade coal for non-regulated sectors are Rs.950/- and downwards. Thus, the above prices of rejects are more than the prices of G-17 band of coal.
- vi) As indicated by MCL around 11 MTPA rejects are likely to be generated out of raw coal throughput capacity of 40 MTPA. As the coal of MCL is of lower bands with high ash content, the projected generation is at the higher side, normally it is felt that depending on the washing

technology, the generation should be around 15% of the throughput and in no case should exceed 20%. Therefore, rejects generation should be in between 6-8 MTPA for a washery with 40MTPA throughput.

- vii) Though the avenue for disposal of the washery rejects of the existing washeries of CCL and from old stock at BCCL have already been there through e-auction, there is inconsistency in the quality of the rejects due to multiple sources of input and substantial derating of washing capacity and yield.
- viii) As far as the new washeries are concerned following steps are suggested for long-term tie-up in favour of reject based power units.
  - a) A normative requirement of washery rejects based on the heat value of the same is required to be developed by MOP/CEA.
  - b) Based on the quality of the rejects (as envisaged in the DPR for new washeries). LOAs may be issued for a quantity of reject as per the normative requirement. This normative requirement should be based on norms prepared by CEA/MOP taking into consideration their boiler design and required GCV with different ranges.
  - c) MOP should appraise the new reject based projects in advance with respect to technology deployed for use of coal rejects in their boilers.
  - d) It is suggested that the system of joint sampling and analysis at the coal companies' laboratory may be followed for proper control of quality of rejects being supplied under linkage.
  - E) LOAs will be converted into FSA for tenure of five years on achieving stipulated milestones. Milestones would ensure synchronization of power plants and

the washery to avoid stranded capacity at either side.

- f) The milestones shall be different for the existing and new plants.
- g) Power station shall have to ensure compliance of 'end use' of the rejects for which LOA is given and shall have to give undertaking for no diversion.
- h) The prices for rejects within a range of 300Kcal/Kg shall be declared by the coal companies.
- 5. Many consumers, particularly in power sector, having FSA with CIL are getting their coal washed through the private washeries. It is suggested that CEA may monitor the specific coal consumption of the power plants routing their coal through the private washery circuit to ensure proper end use of coal. The quantum of rejects generated from coal supplied against these FSAs should be declared by the FSA consumers and SLC (LT) may consider granting linkages of these rejects to reject based power plants.