

**DAMODAR VALLEY CORPORATION
DVC TOWERS : VIP ROAD
KOLKATA – 700 054**

No. DIR (GEN)/10 – 46

14th June 2006

To
The Section Officer (DVC),
Ministry of Power, Govt. of India,
Shram Shakti Bhawan, Rafi Marg,
New Delhi – 110 001.

Sub: Quarterly Performance Review of Damodar Valley Corporation – Status Report thereof.

Dear Sir,

Reference your O.M. no. 21/5/2004-DVC (Vol-III) dated 31st May 2006, please find enclosed the Status Note in respect of the agenda items to be discussed in the next QPR meeting of DVC scheduled on 19th June 2006.

Encl: As stated.

Yours faithfully,

Sd/-
(A.K. Banerjee)
Director (Generation)

STATUS NOTE FOR QUARTERLY PERFORMANCE REVIEW OF DVC – MEETING TO BE HELD ON 19TH JUNE 2006 AT MINISTRY OF POWER, NEW DELHI

Agenda Item (i) Capacity Addition Programme of DVC during the 10th Five Year Plan.

10th Plan Projects of DVC

| Project / Location | Capacity | Commissioning / Target COD |
|--|----------|--|
| Mejia TPS Extn. Unit # 4 (1x210 MW) Dist. Bankura, West Bengal | 210 MW | Under commercial operation since 13.02.2005. |
| Mejia TPS Extn. Unit # 5&6 (2x250 MW) Dist. Bankura, West Bengal | 500 MW | Target COD Unit # 5: 12.01.2007 Target COD Unit # 6: 12.03.2007 |
| Chandrapura TPS Extn. Unit # 7&8 (2x250 MW) Dist. Bokaro, Jharkhand | 500 MW | Target COD Unit # 7: 27.01.2007 Target COD Unit # 8: 27.03.2007 |
| Total | 1210 MW | |

Notes:

- The only Project Milestone of the MOU for the month of April 2006 'Drum Lifting of CTPS Unit No. 7' has been achieved on 25.04.2006.
- CODs of Chandrapura Unit # 7&8 are likely to spillover to 11th Plan.

Agenda Item (ii) Projects of DVC for the 11th Plan and future vision regarding JVs.

11th Plan Projects of DVC

| Project / Location | Capacity | Implementation | Status/ Target |
|--|----------|----------------|--|
| REPLACEMENT / EXTENSION PROJECTS | | | |
| Bokaro 'A' TPS (1x500 MW) Dist. Bokaro, Jharkhand. | 500 MW | By DVC | Water: Available by augmentation of existing allocation. Land: Under DVC possession. Coal: Applied to MoP for up-grading existing linkage from 2.4 to 4.9 MTPA. Pollution: MoE&F clearance expected by 12/06. LOA: By Dec. 2006 thro' negotiation with BHEL. |
| Majia 'B' TPS (2x500 MW) Dist. Bankura, West Bengal. | 1000 MW | By DVC | Water: Clearance received. Land: Under DVC possession. Coal: Blocks received for DSTPS proposed for diversion to MTPS 'B'. Pollution: MoE&F clearance expected by 12/06. LOA: By Dec. 2006 thro' negotiation with BHEL. |
| GREEN FIELD PROJECTS | | | |
| Durgapur Steel TPS (2x500 MW) Dist. Burdwan, West Bengal. | 1000 MW | By DVC | Water: Clearance received. Land: GoWB approval for 979.955 acres Rayati land received & approval for 146.595 acres DSP land in process. Coal: Blocks recd. proposed for diversion to MTPS 'B' – request for fresh allocation made. Pollution: Fresh REIA under progress – MoE&F clearance expected in 9/06. LOA: By Aug 2007 thro' ICB route. |

| Project / Location | Capacity | Implementation | Status/ Target |
|---|------------------|--------------------------------|--|
| Kodarma TPS Stage-I (2x500/500+20% MW) Dist. Kodarma, Jharkhand. | 1000' 1200 MW | By DVC | Water: Clearance received. Land: 80% cost deposited as advance to GoJ to initiate land acquisition. Coal: MoP recommended captive block (Babupara). Pollution: MoE&F clearance received. LOA: By July 2007 thro' ICB route. |
| Raghunathpur TPS Stage-I (2x660 MW) Dist. Purulia, West Bengal. | 1320 MW | By DVC | Water: Clearance received. Land: Process for acquisition in progress. Coal: Applied for coal blocks [Kasta (W), Pachhwara (S), Kasta (Cen)]. Pollution: MoE&F clearance expected by 3/07. LOA: By Dec. 2007 thro' ICB route. |
| JOINT VENTURE PROJECTS | | | |
| Maithon Right Bank TPS (2x500 MW) Dist. Dhanbad, Jharkhand. | 1000 MW | By MPL (JV of DVC & TPC) | Water: Clearance received. Land: 80% of GM & Rayati land possession received, rest in progress. Coal: 50% linkage received from BCCL. DVC requested for Coal Blocks from special PSU dispensation. Pollution: MoE&F Clearance received. LOA: By January 2007. |
| Bokaro Steel TPS (2x250 MW) Dist. Bokaro, Jharkhand. | 500 MW | By BPSCL (JV of DVC & SAIL) | Water: Clearance received. Land: Available. Coal: Blocks applied for. Pollution: MoE&F clearance expected by 3/07 . LOA: By December 2007. |
| Total | 6320/ 6520 MW | | |

Agenda Item (iii) Renovation & Modernization Programme undertaken by DVC.

(A) RETIRING OF VINTAGE UNITS

(a) Bokaro 'A' TPS (Unit – 1,2&3)

- (i) CEA approval for retirement of Bokaro 'A' TPS Units 1,2&3 and installation of new unit(s) in its place has been received on the ground of techno-economic non-viability of revival of these old units.
- (ii) MOU has been signed with M/s BHEL for dismantling of old units along with supply, installation and commissioning of new unit(s).

(b) Chandrapura TPS (Units – 4,5&6)

- (i) The study conducted by NTPC reveals that revival of these units require investment of Rs. 2.04 Crores/MW and also there is hardly any certainty that the operating parameter norms viz. PLF, Auxiliary consumption and Heat Rate fixed by CERC will be achievable even after this huge investment.
- (ii) CEA has been approached on 25.05.2006 to consider retirement of these units on the ground that operation of these units is not techno-commercially viable.

(B) RREFURBISHMENT OF OLD UNITS

(a) Chandrapura TPS (Units – 1,2&3)

- (i) Action plan on short term, medium term and long term basis in a time bound manner of 0-1 year, 0-2 year & 0-3 year has been finalized to enhance the PLF by 6.47%, 6% and 6% respectively with expected overall improvement in PLF of 18.5% on sustainable basis (to about 75%). Replacements contemplated of Boiler pressure parts which have outlived their lives, all the electrical and C&I components, which have become obsolete, Rotary equipment (HT motors, pumps, fans) having high rates of failures and non-availability of spares from OEMs for maintenance (technology obsolescence & import substitution), equipment and sub-systems which are under-performing and less efficient including up-gradation of equipment along with introduction of latest technology and installation of equipment related with environment pollution control.
- (ii) The above refurbishment will be carried out at an estimated cost of Rs. 83.30 Lakhs/MW, investment proposal of which has been discussed with CEA in the meeting on 01.06.2006 at New Delhi.
- (iii) DVC will arrange supply and services of the OEM/OES (Alstom/Mitsui/Gepsil) as per the requirement.

(b) Bokaro 'B' TPS (Units – 1,2&3)

- (i) Action plan on short term, medium term and long term basis in a time bound manner of 0-1 year, 0-2 year & 0-3 year has been finalized to enhance the PLF by 4%, 4.5% and 5% respectively with expected overall improvement in PLF of 13.5% on sustainable basis (to around 65%). Replacements contemplated of Boiler pressure parts which have outlived their lives, all the electrical and C&I components, which have become obsolete, Rotary equipment (HT motors, pumps, fans) having high rates of failures and non-availability of spares from OEMs for maintenance (technology obsolescence & import substitution), equipment and sub-systems which are under-performing and less efficient including up-gradation of equipment along with introduction of latest technology and installation of equipment related with environment pollution control.
- (ii) The above refurbishment, which excludes certain items like coal mill modification/replacement will be carried out at an estimated cost of Rs. 83.30 Lakhs/MW, investment proposal of which has been discussed with CEA in the meeting on 01.06.2006 at New Delhi.
- (iii) DVC will sign MOU with BHEL for supply and services at cost plus basis as per the decision arrived at in the above meeting.

(c) Durgapur TPS (Units – 3&4)

- (i) Action plan on short term, medium term and long term basis in a time bound manner of 0-1 year, 0-2 year & 0-3 year has been finalized to enhance the PLF by 6.3%, 5% and 5-10% respectively with expected overall improvement in PLF of 18.8% on sustainable basis (to about 75%), contemplating replacement of Boiler pressure parts which have outlived their lives, all the electrical and C&I components which have become obsolete, Rotary equipment (HT motors, pumps, fans) due to high rates of failures and non-availability of spares from OEMs for maintenance (technology obsolescence & import substitution), equipment and subsystems which are under performing and less efficient including up-gradation of equipment along with introduction of newer technologies and installation of equipment related with environment pollution control.
- (ii) The above refurbishment will be carried out at an estimated cost of Rs. 29.78 Lakhs/MW, investment proposal of which has been discussed with CEA in the meeting on 01.06.2006 at New Delhi.
- (iii) DVC will sign MOU with BHEL for supply and services at cost plus basis as per the decision arrived at in the above meeting.

The total investment for the above refurbishment of old units at CTPS, DTPS and BTPS 'B' will be around Rs. 655 Crores including the cost of Boiler & Coal Mill works of Bokaro 'B' units to be carried out through OEM M/s Babcock Mitsui and in association with Director (Operation), NTPC. This will yield additional 1952.46 MU generation and generate additional revenue of Rs. 298 Crores. Pay back period for the investment will be around 2 years.

HYDEL:

Maithon Hydel:

Unit-2:

R&M has been completed. The unit load was brought to up-rated capacity of 23.2 MW when abnormal sound was heard. M/s. ALSTOM BHEL Consortium have worked on the machine to rectify the trouble in February,'06. The rectification work has been completed. Machine will be tested at full up-rated load when the reservoir level attains desired level (Aug '06). At present the machine is running at restricted load of 17 MW.

Unit-1&3:

Post R&M performance of Unit 2 will be evaluated after the unit attains full up-rated capacity sometimes in Aug'06 and subsequent action for R&M / LE of Unit 1&3 will be taken.

Panchet Hydel:

Unit-1:

LOI for RLA study has been placed on M/s MECON on 15.09.05. RLA work (Hot & Cold survey) started from 28.12.05 after availing the monsoon generation. RLA study work has been completed and the machine has been re-commissioned on 07.03.2006. Final RLA Report is expected by June 2006 from M/s MECON.

Agenda Item (vi) Efforts made by DVC for improving plant load factor.

PHYSICAL PERFORMANCE – THERMAL POWER PLANTS

| Parameters | Q-4 (05 - 06) | Q-4 (04 -05) | Apr.'05– Mar.'06 | Apr.'04- Mar.'05 | Apr. May'06 | Apr. – May'05 |
|-------------------------------|------------------|-----------------|---------------------|---------------------|----------------|------------------|
| Gross Generation (MU) | 3478.2 | 3013.4 | 12560.1 | 10730.9 | 2075.65 | 1993.7 |
| CEA / MOP Thermal Target (MU) | 3324 | 2900 | 12838 | 10784 | 2388 | 2123 |
| Thermal Generation (MU) | 3448.5 | 2977.4 | 12385.4 | 10471 | 2067.07 | 1972 |
| Backing Down (MU) | 131.4 | 4.61 | 323.5 | 38.36 | 2.42 | 0.34 |
| Hydel Generation (MU) | 29.68 | 35.95 | 174.7 | 259.9 | 8.58 | 21.7 |
| Thermal PLF(%) | 72.24 | 65.34 | 63.98 | 59.0 | 63.89 | 60.9 |
| Thermal PLF (%) | 62.12 | 55.81 | 55.01 | 50.07 | 54.94 | 52.42 |
| Sp. Oil Cons. (ml/U) | 1.93 | 3.54 | 3.15 | 4.5 | 2.92 | 4.09 |
| Sp. Coal Cons. (kg/U) | 0.663 | 0.714 | 0.678 | 0.725 | 0.668 | 0.689 |
| Aux. Power Cons. (%) | 10.28 | 10.86 | 10.72 | 11.23 | 11.03 | 11.01 |
| HR (Kcal/U) | 2793 | 2989 | 2896 | 3226 | 2829 | 3031 |

Achievements :**In 2005-06 & 2006-07 (upto May'06)**

| Parameter | Performance Improvement (Compared to same period of Previous Year) | | |
|----------------------|---|-------------------|---------------|
| | Q-4 (05-06) | Apr.'05 – Mar.'06 | Apr. – May'06 |
| Thermal Generation | 15.82 % | 18.28 % | 4.82 % |
| Thermal PLF (%) | 6.9 | 4.98 | 2.99 |
| Sp. Oil Cons. | 45.48 % | 30 % | 28.61 % |
| Sp. Coal Cons. | 7.14 % | 6.48 % | 3.05 % |
| Aux. Power Cons. (%) | 0.58 | 0.51 | --- |
| Heat rate | 6.56% | 10.23% | 6.66% |

In 2006-07 (Apr'06 & May'06)

| Parameter | Annual MOU Target (Excellent) | Performance compared to MOU | |
|------------------------|----------------------------------|--------------------------------|------------------------------|
| | | April 2006 (Rating between) | May 2006 (Rating between) |
| Thermal PLF (%) | 70.5 | 64.93 (VG-G) | 62.88 (G-F) |
| Sp. Oil Cons. (ml/Kwh) | 2 | 3.25 (E-VG) | 2.89 (E-VG) |
| Aux. Power Cons. (%) | 10 | 10.84 (VG-G) | 11.28 (G-F) |
| Heat Rate Kcal/Kwh) | 2800 | 2866 (E-VG) | 2811 (E-VG) |
| T&D Loss (%) | 2.5 | 2.08 (above E) | 3.19 (F-P) |

Performance Analysis & Efforts Made/Actions Initiated For Further Improvement Of Plant Performance :

Highest Monthly Thermal generation of 1207.43 MU / PLF – 73.43 % has been achieved in Jan.'06. DVC Thermal Generation has improved appreciably in Q-4 (05-06) to 3448.5 MU/ PLF – 72.24 % against 63.9 % PLF(excluding CTPS U #4, 5 & 6 which are under long shutdown since last 2/3 years) achieved in Q-3 (05-06). This shows an improvement of Thermal generation to 103.75 % of Target (3324 MU) in Q-4 compared to that of 98.26 % achieved in Q-3. In Feb.'06, improvement has been sustained by achieving PLF of 70.3 %. During FY 05 – 06 (Apr.'05 – Mar.'06), Total Thermal Generation has been 12385.4 MU which is 96.47 % of the Target (12838 MU). Taking into account Cumulative Backing Dn. of 323.5 MU (approx.) during Apr.'05 – Mar.'06, shortfall would have been 1.1 % only.

NTPC Executives have been deployed at BTPS 'B', CTPS & DTPS to work as partners with DVC in order to achieve plant betterment under "Partnership In Excellence" (PIE) programme launched as per directive of MOP/GOI. Action-Plan for improvement of plant performance with investment details and benefit thereof on Short, Medium & Long-term basis has been prepared in association with NTPC-PIE Group in respect of BTPS 'B', CTPS & DTPS. The same has been submitted to CEA for their views. Station-wise performance analysis & actions initiated for further improvement of plant performance are furnished hereunder.

MTPS (4x 210 MW) - PERFORMANCE

- The Generation achieved 1655.9 MU i.e. 104.4 % of the Target (1586 MU) in Q-4 (05-06) with PLF – 91.26 %. In Apr.'06 & May'06 PLF (%) - 86.96 & 87.45.
- Reduction of SOC & HR from 2.95 ml/U & 2507 kcal/U respectively in Q-3 (05-06) to 2.16 ml/U & 2482 kcal/U in Q-4 (05-06). In Apr.'06 & May'06, SOC (ml/kwh) – 2.38 & 2.65 & HR (kcal/kwh) – 2473 & 2475.
- Reduction of Aux. Power Consumption from 10.53 % in Q-3 to 10.25 % in Q-4 (05-06). In Apr.'06 & May'06, APC (%) – 10.88 & 11.08.
- Insufficient Coal Rake supply & inferior coal quality affecting sustained generation. Coal Cos., Rlys. & CEA are being pursued continuously for augmentation of coal rake supply & improvement of coal quality.
- Materialization (%) of Coal by Rail – Jan.'06 : 73.29, Feb.'06 : 82.33, Mar.'06 : 88.10, Apr.'06 : 80.38 & May'06 : 70.93.

MTPS – IMPROVEMENT MEASURES

Actions Taken

- Unit # 1 : On line Acid Cleaning of Condenser tubes done successfully in May'06 with substantial improvement of Condenser vacuum vis-à-vis regain of full load operation.
- Retrofitting of 6.6 KV SF6 Bkr by Vacuum Circuit Breaker – 57 out of 71 completed.
- Coal Mills : Dirty Air, Pitot Tube Test for all units completed by BHEL – recommendations awaited for implementation.
- Mapping of Furnace temp. by Non-contact Type Infra-red Temp. Sensor and adjustment of Secondary Air Damper.
- Procurement Action for Mill High-chrome liners with grinding balls is in final stage.
- AMC for Stone picking from running conveyor – job started.
- HFO in use in Unit # 1 & 2 from May'06.
- Energy Audit Job awarded to M/s. CONZERVE for Unit # 2 & CHP – Job to start shortly.

Action-Plan

- On Line Acid Cleaning for other units viz. Unit # 2 & 3 in 2006 – 07.
- Implementation of Energy Audit recommendations in 2006 – 07.
- Unit # 4 : Annual O/H and Balance Construction project work of BHEL (10.06.06 – 07.07.06) – just started.
- Unit # 2 : Capital O/H (10.07.06 – 15.08.06)
- Unit # 1 : Short O/H (03.09.06 – 17.09.06)
- Unit # 3 : Short O/H (04.10.06 – 18.10.06)
- Replacement (phase-wise) of BFP Re-circulation Valves by CCI Make Valves.

BOKARO TPS 'B' (3x 210 MW) - PERFORMANCE

- **Unit #1** : Generation 316.62 MU (PLF : 69.8 %) i.e. 139.7 % Target (308 MU) in Q-4 (05-06) - SOC (ml/U) reduced gradually : Jan. to Mar.'06 – 0.65, 1.65 & 1.36. In Apr.'06 PLF – 64.8 % & SOC – 9.23 ml/kwh - Annual O/H done from 06.05.06 to 02.06.06 completed.
- **Unit # 2** : Generation 268.95 MU (PLF : 59.29 %) i.e. 87.03 % Target (309 MU) in Q-4 (05-06) - In Feb.'06, PLF achieved upto 20th – 82.8 % where after unit suffered forced outage due to LP Rotor blade failure - After replacement of 1 No. (27th Stage) Blade. Unit put back on bar on 1st March'06 & running satisfactorily. In Apr.'06 PLF – 62.64 % & SOC – 3.34ml/kwh. Unit suffered forced outage on 19.05.06 due to severe Boiler tube leakage in Water Wall causing damages in Super heater zone tubes and 2nd pass Skin Casing.
- **Unit #3** : Generation 94.54 MU i.e. 65.2 % of Target (145 MU) in Q-4 (05-06) - Boiler tube leakage outage (2 Nos. / 131.7 Hrs) in Q-4 (05 – 06).

Capital O/H from 09.02.06 to 30.03.06 – Part-Load operation due to restricted Blr. Drum Pr. to avoid Blr. tube leakage - In Apr. & May'06, PLF (%) – 31.63 % & 58.13 % and SOC (ml/kwh) – 7.46 & 4.18.

BTPS 'B' – IMPROVEMENT MEASURES

Actions Taken

- Unit # 1 : Annual O/H completed during 06.05.06 to 02.06.06 – Performance improved with stable operation at full load.
- Unit # 3 : Annual O/H carried out during 09.02.06 to 30.03.06.
- AMC for Milling System of U # 1.
- ARC for Radiography of Boiler Pr. parts.

Action Plan

- Unit # 2 Annual O/H : (01.01.07 to 25.01.07)
- AMC for Stone-picking from Conveyor – work yet to be started.
- O/H of 132 KV & 220 KV Bkr. by BHEL – Completed in GT # 1, 2 & 3 , Bus Coupler.
- On-line Oil Integrator in Unit # 2 & # 3 – Jun.'06 (U # 1-Installed)
- Installation of O2 analyzer in all Units at APH outlet – Material procured & to be installed shortly.
- Modification of Mill Classifier Cone – offer received & in process.
- ARC for attending Boiler tube leakages.
- Static Excitation System – material received for one unit - work to be done in Unit # 2 during next O/H.
- Replacement of existing 220 kV Isolators.
- Conversion of 6.6 kV from ungrounded to grounded system.

DURGAPUR TPS (1x 140 MW + 1x 210 MW) - PERFORMANCE

- **Unit # 3** : From Jan.'06 to Mar.'06, PLF (%) – 40.95, 70.86 & 73.87 and SOC (ml/kwh) – 5.63, 0.95 & 0.57. In Apr. & May'06, PLF (%) – 63.4 & 49.
 - ✓ Reduced PLF in Jan.'06 for outages due to Short O/H from 17.12.05 to 04.01.06 & Blr. tube leakage (2 Nos./164.8 hrs.) in Economizer & RH. High SOC in Jan.'06 for recommissioning activities after O/H
 - ✓ Outage due to Boiler tube leakages (4 Nos.) , CW Pp Motor #3A failure and other Elect. troubles affected performance in Apr. & May'06.
- **Unit # 4** : Generation in Q-4 (05-06) - 356.97 MU i.e. 100.55 % of the Target (355 MU) - After Annual O/H from 29.10.05 to 09.12.06, unit stabilized. During Jan.'06 to Mar.'06 with PLF (%) – 80.4, 69.8 & 85.04 and SOC (ml/U) – 1.46, 1.38 & 1.02 respectively - Outages for Boiler tube leakage reduced to 1 No. / 135.5 hrs in Q-4 (05-06).
PLF (%) in Apr.'06 : 76.21 & May'06 : 71.47.

DTPS – IMPROVEMENT MEASURES

Actions Taken

- Unit # 4 : Last Annual O/H (29.10.05 to 09.12.05) completed satisfactorily – Stabilized at 90% MCR.
- Unit # 3 : Annual O/H completed and Synd. on 05.01.06.
- ARC for Blr. Pr. Parts for both Units – work continued.
- AMC of Milling system Unit # 3 & 4 – work continued.
- AMC : C&I System of Unit# 4 – Work started.
- AMC for CHP Housekeeping – started
- Monitoring of Boiler water Chemical parameters.

Action Plan

- Unit #4 : RLA & Capital O/H – 01.11.06 to 30.12.06 (P.O. for Blr. Pr. parts placed & others in process).
Major activities :
 - Replacement of LP Rotor (L.P. Rotor received at site after repair by BHEL)
 - Modification of Air Pre-heater (Material awaited BHEL being pursued).
 - FG Duct expansion joints replacement
 - Static Excitation System of U # 4.
 - Procurement & Installation of Oil Flow Meter (LDO) - in progress.
 - Revamping of Cooling Towers of U # 4 – work to start shortly.
- Unit # 3 : Indigenous substitution of imported C.W. Pump with Motor – 2 sets (Long-term)

CHANDRAPURA TPS (3x130 MW) - PERFORMANCE

- Generation 569.26 MU i.e. 116.89 % of the Target (487 MU) in Q-4 (05-06) – PLF (%) in Jan, Feb & Mar.'06 – 68.6, 67.7 & 66.4.
- PLF(%) in Apr.'06 & May'06 : 31.21 & 53.66
- Unit # 1 : Availability Factor – 100 %. PLF (%) – 53.25 % in Apr.'06 – Partial Loading due to low Condenser vacuum
- SOC (ml/U) of Stn. : Jan.'06 - 0.74, Feb.'06 - 1.1, Mar.'06 - 0.72, Apr.'06 - 2.42 & May'06 – 1.03.
- Unit # 2 : After Short O/H (from 06.04.06 to 09.05.06) , unit is running with PLF more than 75%.
- Unit # 3 : long Outage (06.04.06 to 25.04.06) – 442.5 hrs due to non availability of CW Pump Motor.

CTPS – IMPROVEMENT MEASURES

Actions Taken

- **Short O/H of U # 2** – 06.04.06 to 09.05.06 -Major jobs under taken:
 - D-metering of Blr Pr. Parts & replacement of eroded parts and Front wall tubes.
 - O/H of all Coal Mills and HT & LT Motors.

Action Plan : Short-term

- Short O/H of U # 1 : July'06
- Short O/H of U # 3 : (01.11.06 – 25.11.06)

Common Action Plan (for All DVC Thermal Power Plants)

Common action points emerged out of the two day workshop on “BEST O&M PRACTICES IN THERMAL POWER PLANTS” organized by DVC at Kolkata during 11-12 June 2006, inaugurated by the Secretary (Power), Govt. of India and attended by eminent O&M Engineers in India, have been adopted by DVC for implementation. The action points are:

- Formation of MP Cell, O&E Fuel Management, Quality Assurance Cells, IT cell at each Station through Restructuring & Recruitment of Engineers.
- Formation of R&D & Operation Services Dept. at HQ.
- Up-gradation of Chemical Lab, Electrical Testing and C&I Lab.
- Preparation of Technical Diary in Micro & Macro Forms.
- Spares procurement for plant equipment from OEM/OES (Blr. pressure parts, BFP, CEP, Fans, APH, Cooling Tower, Pumps of thermal cycle).
- Outsourcing of Major Maintenance Activities.
- Replacement of obsolete Equipment / System.
- Implementation of IT oriented integrated Resource Planning System.

- Formulation of training schemes e.g. Simulator Training, Managerial Training, Technical Training.
- Extension of application of Infrared Thermography in the area of Gear Boxes, Bearings, Switch Yards, Transformers etc.
- Immediate procurement of Quick-erect Cup-lock Scaffolding, Pullers etc.
- Procurement of essential Condition Monitoring Equipments.

Agenda Item (v) Financial performance of DVC.

Annual Financial Results 2005-06

Revenue from Sale of Power :

I. Domestic Sale:

In Physical terms, the Domestic Sale of Power during the year was 9475 MU, which is higher by 816 MU as compared to 8659 MU during the previous year registering a growth of 9.42 % . Revenue from Sale of Power was Rs.2877 Crs. which comprises of SEBs – Rs874 Crs. and Non-SEBs – Rs.2003 Crs. and represents a growth of 13.94% over previous year.

The Sale of Power (2004-05) includes Pre-COD Sale and Revenue of 101 MU and Rs. 28 Crs. respectively on account of Mejia TPS Unit 4 commissioned on Feb'05.

II. Export Sale including Unscheduled Interchange (UI) Account:

Export of Power thru' Traders' Account and UI Account has increased by 427 MU during the period under review as compared to the corresponding period of last year. The revenue from Export of Power increased to Rs.645 Crs. from Rs. 415 Crs. earned during last year due to increased volume as well as higher Export Tariff realized during the period.

III. Total Sale:

The overall estimated sale of power has increased to 11720 MU during the year 2005-06 as compared to 10376 MU during last year, thereby representing an increase of 12.95%. In financial terms, the total Revenue from Sale of Power is Rs. 3522Crs, which is 20.95% more as compared to Revenue of Rs.2912Crs. achieved during the corresponding period last year. The growth in sale of power in Physical terms excluding MTPS Unit #4 is 104 MU, which represents 1% increase over last year .

IV. Gross Income :

During the year the Gross Income of the Corporation was Rs. 4676 Crs as against Rs. 3179 Crs. of previous year representing a growth of 47.09 % . The bulk increase is due to income arising out of receipt of state Bond in settlement of JSEB dues under the Securitisation Scheme of Govt. of India.

V. Gross Expenditure & Provisions:

The Operating Expenses of the current year ,previous year as well as RE 2005-06 are stated in enclosed table.

VI. Operating Profit on Power (Including Misc. Income):

(i).**Profit on Power (Before Tax)** : The profit on Power (Before Tax) during the year is Rs.1080 Crs. as compared to Rs 676 Crs., during the corresponding period of Previous year. The additional profit is mainly due to improvement in thermal generation and increase in other income partly offset by dues written off on account of settlement with JSEB under the Securitisation Scheme of Govt. of India..

(ii) **Profit after Tax (PAT)** : The estimated PAT is Rs. 1066 Crs (including Extra-ordinary income of Rs. 807 Crs. due to receipt of State Bonds from Jharkhand partly offset by an arrear contribution to Pension and Gratuity Fund of Rs. 508Crs. and adjustment of deficit of Rs.17 Crs on Flood Control and Irrigation objects) and after deduction of estimated Income Tax of Rs. 295 Crs.

The comparative position of Physical and Financial Performance during 2005-06 is shown in the Table below.

Physical and Financial Performance Highlights

| Particulars | 2004-05 Actual | 2005-06 RE | 2005-06 Unaudited |
|---|-------------------|---------------|----------------------|
| A. Generation (MU) | 10728 | 13305 | 12560 |
| B. Sale of Power (MU) | | | |
| i). Firm Sale | 8659 | 9130 | 9475 |
| ii). Export | 1818 | 2779 | 2245 |
| iii). Total | 10477 | 11909 | 11720 |
| Less: Pre-COD sale of MTPS #4 | 101 | - | - |
| iv. Net Sale (MU) | 10376 | 11909 | 11720 |
| C. Financial Data (Rs. Crs.) | | | |
| 1. Revenue: | | | |
| From Sale of Power | | | |
| i). Firm Sale | 2525 | 2702 | 2877 |
| ii). Export | 415 | 748 | 645 |
| iii). Total | 2940 | 3450 | 3522 |
| Less: Pre-COD sale of MTPS #4 | 28 | - | - |
| iv. Net Sale | 2912 | 3450 | 3522 |
| v. Misc. Income | 125 | 103 | 348 |
| vi Extra-ordinary Income | 142 | 220 | 806 |
| vii. Total Revenue | 3179 | 3773 | 4676 |
| 2. Variable Cost | | | |
| i). Fuel | 1172 | 1411 | 1367 |
| ii) Purchase of Power | 289 | 113 | 235 |
| iii) Sub-total | 1461 | 1524 | 1602 |
| 3. Fixed Cost | | | |
| i) Operation & Maintenance | 531 | 581 | 557 |
| ii) Depreciation | 170 | 202 | 220 |
| iii) Interest | 141 | 148 | 148 |
| iv) Bad debt & Provisions | 58 | 37 | 263 |
| Total | 900 | 968 | 1188 |
| 4. Past years' Debit [Pension Fund etc.] | 19 | 220 | 508 |
| 5. Gross Expenditure & Provisions | 2380 | 2712 | 3298 |
| 6..POWER PROFIT BEFORE TAX (Rs. in Crs.) | | | |
| i).Current Year's Operation | 676 | 1061 | 1080 |
| ii).Extra-ordinary and Past Years' Transaction | 123 | - | 298 |
| iii) Total | 799 | 1061 | 1378 |
| 7.Loss on Irrigation & Flood Control | (58) | (56) | (17) |
| 8.Income Tax | 109 | 175 | 295 |
| 9. Profit after Tax | 632 | 829 | 1066 |

Agenda Item (vi) Position regarding settlement of dues with CPSU. & steps taken by DVC.

Position of Dues of Central Public sector Undertakings

(Rs. in Crores)

| SI. No. | CPSU | Principal Dues | Delay Payment Surcharge | Minimum Guaranteed Energy Charge | TOTAL |
|---------|--------------|----------------|-------------------------|----------------------------------|--------------|
| 1 | HCL | 25.66 | 8.95 | 0.00 | 34.61 |
| 2 | FCIL | 34.70 | 1.80 | 17.41 | 53.91 |
| | TOTAL | 60.36 | 10.75 | 17.41 | 88.52 |

Hindustan Cables Limited (HCL)

Total outstanding dues excluding accrued interest as on 30.04.05 : Rs. 34.61 Crores
Average monthly bill amount : Rs. 17/18 Lakhs

Steps taken for recovery of the dues

- CMD, HCL in the meeting with Chairman, DVC on 06.07.05 assured to make monthly payments and also clear the dues accumulated since March'05 but failed to comply. Balance dues have been assured to be paid in one go once the revival package is finalized by BIFR.
- Neither payment nor any payment schedule received from HCL despite vigorous persuasion.
- MoP has been requested on 24.08.05, 09.11.05 and on 20.02.06 to take up the matter with the Ministry of Heavy Industries, Govt. of India.

Fertilizer Corporation of India (FCIL), Sindri Unit

Total outstanding dues excluding accrued interest as on 28.02.05 : Rs. 34.70 Crores

Steps taken for recovery of the dues

- Out of offered 3 options for one time settlement, DVC agreed to accept 50% of the Principal Dues, less the cost of Sindri Substation, associated equipment & land.
- DVC officials met MOFC on 23.02.05 – MOFC informed that FCIL is registered under BIFR. No bilateral settlement is possible since the case has been referred to Hon'ble Delhi High Court.
- Draft MOU for settlement of dues was sent to FCIL on 07.07.05, which is still under examination by FCIL before placement to their Board and the concerned Ministry for clearance.
- Official liquidator was to be appointed by Hon'ble Delhi High Court in its hearing on 22.02.2006, but the hearing was adjourned and next date of hearing was fixed on 04.05.2006.
- FCIL has been requested to intimate the present status of the hearing. DVC vigorously pursued with FCIL along with personal visits to FCIL office at Noida on 14.07.05, 14.09.05, 14.12.05 & 7.02.2006.

Agenda Item (vii) Efforts made by DVC in fulfilling social responsibility as envisaged in DVC Act.

In order to accelerate the process of developments, as envisaged in the DVC Act, 1948, with thrust in setting up of collaborative mechanism for wider participation of various stakeholders and infuse new ideas, embark on new initiative, hitherto unexplored, a document titled "**NEW INITIATIVES – A CONCEPT PAPER**" has been prepared covering the following aspects and circulated to the Participating Governments.

- 1) Integrated Development & Utilization of Damodar Valley Water Resources.
- 2) Afforestation & Soil Conservation – A Mission Approach.
- 3) 'DVC Foundation' for Social Integration Programme (SIP).
- 4) Capacity Addition Programme.
- 5) Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY).
- 6) T&D Infrastructure – Planning & Execution.
- 7) Development of Tourism in Damodar Valley area in the State of Jharkhand.

A synopsis of the new initiatives other than the Capacity Addition Programme and Rural electrification programme in Jharkhand and West Bengal, which have been dealt with elsewhere, is given below.

Integrated Development & Utilization of Damodar Valley Water Resources.

- i) To expedite the completion of the Balpahari Project on the Barakar River at the upstream of Maithon, CWC has been asked to take up preparation of Detailed Project Report (DPR) simultaneously with Pre-feasibility Report (PFR) on fast track;
- ii) To prepare a Master Plan for "Integrated Development & Utilization of Damodar valley water Resources" a workshop is being organized by DVC in collaboration with Water Resource Department, govt. of Jharkhand and Irrigation & Waterways Department, Govt. of West Bengal on 7-8 July 2006 at Indian Institute of Coal Management (IICM), Ranchi, which will be inaugurated by the Hon'ble Chief Minister, Jharkhand and attended by the dignitaries and experts in the field.

Afforestation & Soil Conservation – A Mission Approach

Afforestation and Soil Conservation activities of the Corporation spread over private, vested and forest land require greater co-ordination between the various wings of DVC and integration between the Participating Governments and the Corporation. With this view in end, a mission called "DAMODAR VALLEY MISSION" has been proposed to be constituted with the following objectives:

- i) To make Damodar Valley area greener and environment friendly and to provide a common forum to the Corporation and Participating Govts. for greater integration and effective implementation of the programmes;
- ii) To contribute in scientific management of soil & water conservation, environment and ecology through scientific, technical and research activities;
- iii) To promote, facilitate and advise on scientifically sound and technologically proven soil & moisture conservation measures and afforestation techniques;
- iv) To co-ordinate between various Govt. departments, Municipal bodies, Panchayati Raj Institutions (PRI)/ Local bodies, Statutory bodies and Institutions;
- v) Support Training and capacity building of various categories of officers, NGOs, representatives of Local bodies etc. and facilitate awareness generation;
- vi) To support research and development activities on soil conservation and related projects, economic utilization and management of natural resources;
- vii) Facilitate setting up of Resource Centres under joint partnership;
- viii) Promote and support Soil Moisture conservation and Water harvesting projects under community participation;
- ix) To give policy guidance on SWC as well as IWM.

The commission will consist a General Body and an Executive Committee.

General Body:

The General Body may be chaired by the Chief Secretary of the Jharkhand. Secretary, DVC will act as the Member-Secretary with suitable representatives from the Central and State Ministries of Environment & Forests, Power and Agriculture, as members.

Executive Committee:

The Executive Committee may be chaired by the Development Commissioner of Jharkhand and may include Director (Soil Conservation), DVC and the representatives from the State Ministries of Forest & Agriculture as members. Chief Environment Officer, DVC will function as the Member Convener.

The mission will access fund from the Ministry of Agriculture, Govt. of India, Ministry of Environment & Forests, Govt. of India, Participating State Govts. and DVC.

A workshop is being organized by DVC on "OPTIMAL AFFORESTATION PLAN" in Damodar Valley area at Forest Research Institute, Dehdardun on 23rd June 2006, which will be attended by experts and scientists from the field.

'DVC Foundation' for Social Integration Programme (SIP)

In order to design, manage and implement the Social Integration Programme (SIP) optimally and more broad based through participation of various stakeholders and using expert inputs, it has been proposed to create a foundation named "DVC FOUNDATION FOR SOCIAL SECTOR MANAGEMENT" covering all aspects of socio-economic developments of the inhabitants in the prescribed area of DVC's operation. The objectives of the Foundation shall be:

- (a) To initiate, continue, support and strengthen the Social Integration Programme (SIP) in DVC's area of operation;
- (b) To oversee implementation of the socio-economic development programmes through transparent and consultative process;
- (c) To provide clearing house for exchange of information and ideas with a view to enhance socio-economic development in DVC's area of operation;
- (d) To engage various stakeholders in promoting and enhancing dialogue during planning and implementation of socio-economic development programmes;
- (e) To aid and advise DVC on issues in the field of socio-economic development as and when referred to by DVC;

The Foundation will be guided by a Steering Committee consisting of the Chief Secretary, Govt. of West Bengal as Chairman, Development Commissioner, Jharkhand as Vice Chairman, Chairman, DVC as Member and three representatives, each of the concerned departments of the Participating Governments, two representatives of reputed research institutes, two representatives of NGOs and two public representatives from the area of DVC operation, one each from West Bengal and Jharkhand. Secretary, DVC will act as Member Secretary of the Foundation.

The Foundation will have separate accounts. It will receive funds from DVC and submit its utilization annually to DVC at the end of each financial year.

T&D Infrastructure – Planning & Execution

DVC has drawn up a comprehensive plan for augmentation including strengthening of its T&D network matching with the generation capacity addition. The plan includes creation of additional new sub-stations at various load centers in the state of West Bengal & Jharkhand along with associated transmission lines to provide stable power and promote industrial growth.

The plan comprise of 4 new 220 KV and 1 new 132 KV Substations and about 1200 Ckm 220KV/ 132 KV Transmission Lines in Jharkhand and 4 new 220 KV, 2 new 132 KV Substations and approximately 500 Ckm Transmission Lines in West Bengal.

While works of 4 substations (220 KV Ramgarh, Barjora, Burnpur and 132 KV Hazaribagh) have been completed, works at other places are in progress/ being pursued and followed up with the State Govts. for land availability and forest clearances.

Development of Tourism in Damodar Valley area in the State of Jharkhand

In view of the bright prospect and opportunity, DVC intends to venture into "Development of Tourism" (so far un-tapped) in collaboration with the participating State Govts., as a commercial activity. Accrued economic benefits (Direct & indirect) will aid the socio-economic development of the region.

For Tourism Development Programme on commercial basis, a Consultant will be engaged for preparation of a Master Plan covering all important tourist places in the Damodar valley. Tilaiya Dam Project of DVC will be developed on priority basis within a time bound programme.

Extension of subsidized/ Free Health Care facilities of DVC to BLP Categories

DVC has liberalized its existing policy in respect of extending medical facilities (both indoor & Outdoor) to outsiders/ poor villages residing in the periphery of majors projects through its own

hospitals and dispensaries. The outsiders have been grouped under two categories BPL (Below Poverty Line) and APL (Above Poverty Line)). The rates which were existing have been reduced to 50% (approx.) for patients belonging to APL category. The reduced rates have been further subsidized to very nominal/ token charges for the patients of BPL category. The OPD consultation and procedural services for operations etc. are provided free to BPL Card holders.

Active participation of DVC in National Health Programme

DVC has decided to participate actively in various National health programmes e.g. (i) National Control Programme for Blindness (ii) DOTS (RNTCP) (iii) Programme for Malaria Control (iv) Programme for Filaria Control (v) National AIDS Control Programme (vi) Family Planning Programme (vii) Immunization Programme.

Prevention of Pollution of Water in Rivers under Damodar Valley

In order to prevent pollution in Damodar Valley River system, DVC has assigned National Environment Engineering Research Institute (NEERI) to prepare a feasibility report covering the following aspects:

- (a) A status Report of Damodar river system.
- (b) An interim action plan within a short time (5-6 months).
- (c) Recommendation for implementation of the said action plan.

Agenda Item (viii) Implementation of Rural Electrification Programmes in Jharkhand and West Bengal.

Rural Electrification by DVC under RGGVY

West Bengal :

- **District :** East Medinipur.
- **Coverage :** Mouzas – 807 under Phase-I & Phase-II in 22 nos. Blocks.

| Description | Phase – I | Phase – II |
|--------------------------------------|-------------|-------------|
| Un-electrified Mouzas | 224 | 583 |
| 11KV Line (3 phase) | 371.00 CKm | 1215.20 CKm |
| LT Line (3 phase 4 Wire) | 213.00 CKm | 583.00 CKm |
| 11/0.4 KV Distribution Transformer | 307 Nos. | 759 Nos. |
| Service connection to BPL households | 2,270 Nos. | 16,074 Nos. |
| Total households (including BPL) | 18,344 Nos. | |
| Expected completion date | 31.03.06 | 31.03.07 |

- REC, sanctioned project cost at Rs. 7771.44 lakhs (Rs. 6938.79 as project cost and Rs. 832.65 lakhs as DVC's Service charge). Out of above REC released fund for Rs. 2331 lakhs in favour of DVC towards first installment including proportionate DVC's service charge.
- Turnkey Contract placed on M/s SPML, Kolkata based on project sanction by REC for a total contract value of Rs. 64.13 crores. Separate contract for augmentation of existing Singda S/s of WBSEB and Contract for Metering at LT side of Distribution transformers have been finalized and Notification of Award issued on 31.01.06 & 16.02.06 respectively.
- **Target for 1st. Quarter, 2006 :** 150 nos. mouzas.

- **Status as on 12.06.06 :**
 - Field survey completed - 731 mouzas.
 - Activity taken up - 377 nos. mouzas
 - Pole erection completed - 88 nos. mouzas.
 - Stringing completed - 62 nos. mouzas.
 - DT erection completed - 150 nos. mouzas.
 - Mouza electrified - 52 nos.
 - Service connection to BPL households – 102 nos.
- **Material Status :** All materials, commensurate with erection targeted, are either available at Site or in the pipe line of dispatch followed by inspection.
- **Remarks :**
 - *Substitute Mouzas* – 76 nos. mouzas out of allocated 807 mouzas already electrified. WBSEB submitted the list on recommendation of District Authority on 31.01.06. Endorsement from REC for inclusion in the DPR awaited.
 - Progress of work suffered initially for around 2 months in finalization of PSC Poles, in the month of Sept./October, 2005 due to inaccessibility of work site caused by Flood and for approx. 20 days in April/May, 2006 following suspension of field activities due to Election process.

Jharkhand :

- **Assigned Districts :** Dhanbad, Bokaro, Giridih, Hazaribag, Koderma, Chatra, Gumla & Simdega.
- **Proposed coverage :**
 - Blocks - 76 Nos.
 - Villages - 8,547 Nos.
 - BPL Households - 6,50,710 Nos.
 - APL Households - 3,99,773 Nos.
 - New Sub-stations - 42 Nos.
- **Physical progress as on 12.06.06 :**
 - a) DPR submitted for all the eight districts to JSEB / REC for project sanction. District-wise DPR cost are as below;

| District | Estimated Project Cost |
|--------------|------------------------|
| 1. Dhanbad | Rs. 62.48 Crores. |
| 2. Koderma | Rs. 58.59 Crores. |
| 3. Bokaro | Rs. 58.81 Crores. |
| 4. Simdega | Rs. 98.48 Crores. |
| 5. Giridih | Rs. 220.63 Crores. |
| 6. Gumla | Rs. 134.04 Crores. |
| 7. Chatra | Rs. 141.68 Crores. |
| 8. Hazaribag | Rs. 165.69 Crores. |

- b) Monitoring Committee of MoP, Govt. of India on RGGVY in its meeting held on 09.05.06 has accorded “in principle” approval of DPR submitted by DVC for Dhanbad, Koderma & Bokaro districts for carrying out pre-award / initial preparatory activities.

c) NIT floated on 23.05.06 for RE projects in Dhanbad, Koderma & Bokaro districts related to 11KV portion in anticipation of formal sanction by REC. Tentative schedule for placement of order in August, 2006.

➤ **Target for village electrification within 2006-07 :**

Completion of RE activity in 800 villages.

Agenda Item (ix) Development of captive coal mines.

The Joint Venture Company DVC EMTA COAL MINES LIMITED with Eastern Materials & Trading Agency (EMTA) has been incorporated under the companies Act, 1956 by Registrar of Companies, West Bengal on 5th July 2005 for development and operation of Captive Coal Blocks allocated to DVC.

Coal Block Allotment already received

The coal blocks of (i) Barjora (North) (ii) Khagra-Joydev and (iii) Kasta (East) have been allocated to DVC on 03.03.2005 for end use at MTPS Units 4,5&6 and Durgapur Steel TPS. Gondulpara coal block has been allocated to DVC on 50:50 sharing basis with TVNL on 13.01.2006 for end use at CTPS Units 7&8.

Additional Allotment for Other Coal Blocks

MoP recommended to MoC on 29.12.2005 in favour of DVC for allotment of Babupara Coal Block for end use at CTPS Units 7&8 and Pachwara (South) Coal Block for end use at MTPS Extn. units and Durgapur Steel TPS.

Application has been submitted to MoP/MoC for recommendation/ allotment of Kasta (West), Kasta (Central), Rauthpara, Amrakonda-Mugadangal and Kalyanpur-Badalpara Coal Mine Blocks. Application has been submitted to MoC for Tokisud Coal Block for Ramgarh TPS.

Application has been submitted to MoC for Banherdih and Rajbar E&D Coal Blocks for Maithon Right Bank TPP of MPL.

After finalization of terms and conditions an agreement has been signed between DVC and TVNL on 20.12.2005.

Application has also been submitted to MoC against its notification for allotment of Captive Coal Mine Block Tubed for end use at CTPS Units 7&8 and Kodarma TPS.

Mining of Captive Coal Blocks

- Mining plans for Barjora (North) and Khagra-Joydev Coal Blocks have been submitted to MoC for approval on 08.03.2006 and 13.04.2006 respectively.
- Road Maps in the form of Bar Chart for implementation of Captive Coal Blocks of Barjora (North) and Khagra-Joydev are enclosed.

Agenda Item (x) Payment of dues by Jharkhand to DVC.

1. Current Dues of JSEB :

Total outstanding Dues payable by JSEB as on 30.04.2006

As per DVC : Rs 381.36 Crores

As per JSEB : Rs 153.33 Crores
(Setting aside TISCO Differential & Line Loss Component)

JSEB has been requested to enhance their LC value to Rs 59.33 Crores from Rs 45.00 Crores, as per provision of the TPA of the securitization scheme. Till date JSEB has not enhanced the LC value in spite of several reminders.

Dues of JSEB for more than 90 days as on 31.05.2006, is only **Rs 94.65 Crores** (setting aside TISCO Differential & Line Loss amount).

2. Securitisation of JSEB Dues:

DVC proposed to JSEB that DVC will waive Rs 317.24 Crores (subject to approval of DVC Board), and subject to acceptance by JSEB of Rs 752.59 Crores as their securitization dues as on 30.09.2001 for power supply to undivided BSEB up to 31.03.2001.

Bonds worth **Rs 752.59 Crores** has been received by DVC in January'2006. The balance Bonds payable by JSEB is **zero**, after waiver of **Rs 317.24 Crores** by DVC.

3. Steps taken for recovery of JSEB dues

- A. Reconciliation of total dues, setting aside TISCO differential, line loss and interest has been made jointly with JSEB from 02.05.2006 to 05.05.2006.
- B. Claims of current dues setting aside TISCO differential, line loss and interest are lodged after obtaining approval of DVC Board.
- C. Vigorously interacting with JSEB and Govt. of Jharkhand is being done for enhancement of the LC value to Rs.59.33 Crores from existing value of Rs.45.00 Crores.
- D. Decision of claims of TISCO differential and line loss is dependent on tariff fixation of DVC at CERC and JSERC level.
- E. Shifted of DVC tariff meters at 6(six) points to consumers' premises out of 8(eight) points, as decided, has been completed and the line loss amount are revised accordingly for the already shifted points. Meter shifting of balance 2(two) no. of consumer points of supply are in progress.

Agenda Item (xi) Progress of Joint Venture between DVC and Tata Power Company Ltd.

STATUS OF MAITHON RIGHT BANK PROJECT (1000 MW) AS ON 10.5.2006

1. Clearances available

- ✓ Clearance of GOI, Govt. of Jharkhand & Govt. of W.B. (Clearance from Jharkhand Pollution Control Board is valid till September 2006)
- ✓ Water Clearance from Govt. of Jharkhand & CWC (DVRRC)
- ✓ Clearance under sec. 18 (i) (C) of DVC Act.
- ✓ Aviation Clearance from AAI (Since expired on 28.2.2006 after 4 years and revalidation applied)
- ✓ Forest Clearance from MoE&F, GoI dated 26.4.2004
- ✓ Environmental Clearance from MoE&F, GoI dated 22.6.2004
- ✓ Long Term Coal Linkage confirmed by SLC (LT), Ministry of Coal from BCCL mines
- ✓ Authorization u/s 29 (2) & (3) of Electricity supply Act
- ✓ Transportation clearance by Indian Railways

2. Provision of Railway Siding Facilities - The work has been taken up by RITES. The field survey from Mugma Railway Station to Project site has been completed. An Inception Report received from RITES. The comments received from DVC and TPC has since been furnished to RITES for finalizing the Feasibility Report. Approval from railways for the proposal of RITES is awaited. In the meantime, RITES informed the Company to remit 1% of project cost amounting to Rs.71.14 lakhs to Railway Authorities at Kolkata for processing and expediting Railway clearance.

3. Fuel Supply from BCCL - BCCL willing to confirm only 50% of the linked quantity and propose to request CIL to identify supplier for the balance linkage. Formal response from BCCL is awaited.

As a parallel action, in response to the advertisement from Ministry of Coal, the Company has made an application for captive coal block (which could meet 25% of the requirement) for mining at Jitpur in Chuperbhita basin in Jharkhand. CEA has asked to furnish details in its proforma for further consideration on our application. Necessary details were since furnished. CEA has since then recommended to Ministry of Power.

Since the above details will need to go through a screening process, as a long term security measure, DVC has also made request to MoC for allotment of coal mine blocks (Banhardih & Rajbar E&D) on nomination basis, out of the list of blocks identified by MoC for nomination under special dispensation basis to Government Undertakings. Response awaited.

4. Raw Water Intake System - Lol has been placed on WAPCOS. WAPCOS has submitted Engineering and System Design report. WAPCOS has now taken up Phase II of the Study for preparation of Model Studies.

5. Power evacuation - The company has identified consumers on in-principle basis (DVC- 300 MW, NDPL – 400 MW and RPPC – 200 MW) and made an application to PGCIL for open access for disposing power. PGCIL has agreed to undertake a study for power passage to RPPC and NDPL for which the Company has deposited a sum of Rs.9.72 lakhs. After completion of load flow studies, PGCIL will discuss with the concerned State transmission Utilities and inform the Company accordingly. The report is awaited by end of May 06.

6. R&R Plan - Socio Economic survey assignment was entrusted to M/s Xavier Institute of Social Sciences, Ranchi (XISS). The final report was received and after detailed discussions with officials of DVC and TPC, a draft rehabilitation and resettlement plan will be submitted to District Authorities.

7. Status on land acquisition

| Details | Raiyati \$ | GM@ | Forest | Total |
|---------------------------------------|------------|--------|---------|---------|
| Total land required (in acres) | 564.67 | 119.74 | 436.41 | 1120.82 |
| Possession received (so far) | 431.55 | 56.58 | nil | 475.02 |
| Payment made so far (in acres) | 558.33 | 105.82 | # | |
| Payment made (Rs. In lakhs) | 1831.00 | 132.50 | 1291.00 | |
| Balance payment estimated (Rs. Lakhs) | - | 40.00 | 500.00 | |

\$ R&R Plan is to be finalized for proceeding further for the possession of 133.12 acres.

@ 51.44 acres – Govt's final approval is awaited; 11.72 acres are lying with DC, Dhanbad

Stage I Clearance obtained. DVC deposited NPV for forestland. Alternative non-forest land has been identified as 365 acres in Koderma and 79 acres in Hazaribagh for compensatory afforestation. As per the requirement of the concerned DFOs, this land is being demarcated with concrete pillars. Pillaring work is stopped unauthorisedly by some local persons. DVC is sorting out the problem. After completion of pillaring work, DFO will send his recommendation for notification and mutation.

- Land for Captive Railway Siding is yet to be applied; awaiting details from RITES.
- Application made to JSEB for shifting of existing power lines inside the project area.
- Application made to Executive Engineer for widening and renovating main approach project road to the site from NH-2.
- Application yet to be made for survey for Construction of Power Transmission line from DVC's R/B Sub station.

8. Technical aspects

- Specifications being prepared in 3 packages (a) Main Plant consisting of Boiler, Turbine and related auxiliaries but without civil works; (b) Balance of Plant, without civil works; and (c) Civil works;
- Main plant EPC specifications by keeping the unit size open (250 MW / 350 MW / 500 MW) are redone and will be discussed with DVC before taking a final decision.

- Tentative schedule for the following is drawn:
 - Coal linkage (allotment of coal mine blocks) by June 2006
 - EPC Specifications by July 2006
 - Selection of EPC Contractor by December 2006
 - Acquisition & transfer of Land by Sept 2006
 - Financial Closure by Dec 2006
 - COD Unit # 1 (500 MW) by Dec 2009 and
 - COD Unit # 2 (500 MW) by June 2010

9. Expenses incurred for the project:

| | |
|--|----------------------|
| Till 31.3.2005 | Rs. 3,33,02,832 |
| Incurred during the financial year 2005-06 (Net) | <u>Rs. 55,87,063</u> |
| Expenses incurred till 31.3.2006 to be capitalized | Rs. 3,88,89,896 |
| Expenses incurred during April 2006 (provisional) | <u>Rs. 6,00,000</u> |

Agenda Item (xii) Delay in supply of material for DVC Thermal Power Projects.

MTPS Unit-5: Delay in Supply of Materials to achieve major milestones

| Milestone | Revised date | Outstanding Materials | Commitment by BHEL | Requirement at Site |
|--------------------------|--------------|--|------------------------------------|---------------------------------|
| Boiler & Aux. | | | | |
| Hydro Test (Drainable) | 07/06 | Suspensions | Despatch from Works by end June'06 | Delivery at Site by end June'06 |
| | | Furnace rear arch Tubes | | |
| | | Extended Side Walls | | |
| | | Riser | | |
| | | Steam Cooled Wall | | |
| | | Wind Box Assembly | | |
| | | Pressure Part Attachments | | |
| TG & Aux. | | | | |
| TG Box-up | 11/06 | IP Turbine | 09/06 | 07/06 |
| | | Cross Around Piping | 08/06 | 07/06 |
| | | LP Extraction Assly. | 08/06 | 07/06 |
| | | ESV & CV | 08/06 | 07/06 |
| | | Piping & Mounting | 09/06 | 07/06 |
| Other Major Eqpt. | | | | |
| | | Generator Transformer From Bhopal Unit | Despatch from Works by Nov'06 | Delivery at Site by mid Nov'06 |

MTPS Unit-6: Delay in Supply of Materials to achieve major milestones

| Milestone | Revised date | Outstanding Materials | Commitment by BHEL | Requirement at Site |
|--------------------------|--------------|--|------------------------------------|--------------------------------|
| Boiler & Aux. | | | | |
| Hydro Test (Drainable) | 08/06 | Suspensions | Despatch from Works by end July'06 | End July'06. |
| | | Roof Panels | | |
| | | Steam Cooled Wall Panels | | |
| | | Furnace rear arch Tubes | | |
| | | Pressure Part Attachments | | |
| | | Wind Box Assembly | | |
| | | SH/Economiser Coil | | |
| TG & Aux. | | | | |
| TG Box-up | 12/06 | IP Turbine | 12/06 | 09/06 |
| | | LP Turbine | 01/07 | 10/06 |
| | | Cross Around Piping | 01/07 | 10/06 |
| | | ESV & CV | 12/06 | 10/06 |
| | | Piping & Mounting | 01/07 | 11/06 |
| Other Major Eqpt. | | | | |
| | | Generator Transformer From Bhopal Unit | Despatch from Works by Jan'06 | Delivery at Site by mid Jan'06 |

CTPS Unit-7: Delay in Supply of Materials to achieve major milestones

| Milestone | Anticipated Date | Outstanding Materials | Commitment by BHEL | Requirement at Site |
|--------------------------|------------------|--|---------------------------------|----------------------------------|
| Boiler & Aux. | | | | |
| Hydro Test (Drainable) | 12/06 | Suspension | No Commitment | 06/06 |
| | | Steam Cooled Wall | | |
| | | Roof Panel | | |
| | | Wind Box assembly | | 08/06 |
| | | Loose Tubes | | |
| | | Pressure Parts attachment | | |
| TG & Aux. | | | | |
| TG Erection | Start: 10/06 | Pedestals(F.B., HP, IP, LP) | 08/06 | 07/06 |
| | | LP Inner & Outer Casing | 01/07 | 08/06 |
| | | HP Turbine | 11/06 | 11/06 |
| | | IP Turbine | 01/07 | 12/06 |
| | | LP Turbine | 03/07 | 12/06 |
| Other Major Eqpt. | | | | |
| | | Generator Transformer From Bhopal Unit | Despatch from Works by April'07 | Delivery at Site by mid April'07 |

CTPS Unit-8: Delay in Supply of Materials to achieve major milestones

| Milestone | Anticipated date | Outstanding Materials | Commitment by BHEL | Requirement at Site |
|---------------------------|------------------|--|--|----------------------------------|
| Boiler & Aux. | | | | |
| Drum lifting | 07/06 | Boiler Drum | No commitment by BHEL. Reported to be despatched on 5.6.06 | Mid 06/06 |
| Hydro Test (Drainable) | 02/07 | Suspension | No Commitment | 07/06 |
| | | Steam Cooled Wall | | |
| | | Roof Panel | | |
| | | Wind Box assembly | | 10/06 |
| | | Loose Tubes | | |
| Pressure Parts attachment | | | | |
| TG & Aux. | | | | |
| TG Erection | Start: 12/06 | Pedestals(F.B., HP, IP, LP) | 10/06 | 09/06 |
| | | LP Inner & Outer Casing | 04/07 | 10/06 |
| | | HP Turbine | 07/06 | 02/07 |
| | | IP Turbine | 04/07 | 02/07 |
| | | LP Turbine | 05/07 | 02/07 |
| Other Major Eqpt. | | | | |
| | | Generator Transformer From Bhopal Unit | Despatch from Works by April'07 | Delivery at Site by mid April'07 |

Agenda Item (xiii) *The coal stock position at Mejia Thermal power Station of DVC .*

The coal stock position at Mejia TPS as on 13.06.06 – 85,534 MT equivalent to seven (7) days consumption level.

In spite of best efforts taken by Plant and Head Quarter the stock of coal at MTPS could not be raised to the desired level because of the following reasons:-

(a) In most of the occasions, a portion of wagons placed at MTPS contain big size coal/boulders/stones for which the whole process of evacuations and the CHP system of MTPS are jeopardized. As a result not only the said rakes take more time to unload but also movement of following rakes are hampered. It may be mentioned here that receiving un-sized coal is a regular phenomena and cannot be improved to the desired level. Even after persuasion jointly with CEA representatives coal companies fail to supply sized coal committed by coal companies against the sizing charge claimed by them.

(b) The system of unloading could not be utilized fully as in many occasions the track hopper remain idle for non-placement of rake by railways. Further, in many occasions it has been observed that rakes are placed in a clubbed manner causing overall delay of the cycle time of rakes, which are placed latter.

(c) In some of the occasions railway operatives (Drivers and Guards) were not ready to co-operate even for changing the position of the rakes over the track hopper (i.e. from one placement

to another) on the ground of long hours of their duty and demanded for replacement by separate crews. DVC always tried to accommodate their request to bring their relievers from serving stations (Ranigunj), which is far away from MTPS. Such replacement of operatives took lot of time and invited unavoidable delay. During recent visit of CEA representatives on 19.05.06 the similar incident was occurred and witnessed by them. The matter has been apprised to Railways by CEA representatives for taking corrective action on the issue.

The following is the status of allotment/receipt position of coal for MTPS since January, 2006.

MTPS

| Month | No. of Rakes/Month | | %Receipt by Rail | Linkage by Road (MT) | | % Receipt by Road | Overall Receipt w.r. t. allotment in MT (%). (*) |
|---------|--------------------|---------------------|------------------|----------------------|-------|---------------------|--|
| | Allotted | Recd. | | Allotted | Recd. | | |
| Jan. 06 | 99 | 83 | 83.84 | 90000 | NIL | - | 59.94 |
| Feb. 06 | 99 | 88 | 88.89 | 90000 | 4907 | 05.45 | 66.78 |
| Mar. 06 | 99 | 101 | 102.02 | 90000 | 52979 | 58.88 | 88.12 |
| Apr. 06 | 118 | 95 | 80.51 | 85000 | 96533 | 113.57 | 80.38 |
| May 06 | 118 | 85 | 72.03 | 85000 | 87321 | 102.73 | 70.93 |
| Jun. 06 | 118 | 32 as on 13.6.06 | 62.58 | 85000 | 28133 | 76.38 (Pro-rata) | 63.25 (Pro-rata) |

(*) Based on actual Tonnage received and not based on no. of Coal Rakes.

It may be further impressed upon that DVC has recently revised terms and conditions of the contract associated with unloading agency to ease out their problem and improvement of unloading of coal at MTPS.

MTPS gets 80% of its allocated coal from BCCL collieries located at a distance of 120 to 150 Kms. away from the plant, which is of inferior grade, while MTPS is located almost at the pithead of ECL collieries. In view of above, CEA has been requested to look into the matter and consider arranging quality coal from ECL collieries @ 70,000 MT per month from Sonpur Bazari/ Puroshottampur/ Kothadi Collieries and @ 40,000 MT per month from Salanpur area till availability of quality coal from the Captive Coal Mine Blocks of DVC with effect from December 2007

Agenda Item (xvi) Progress of filling the vacant posts including Director Level and reservation backlog for SC&ST candidates in DVC.

(A) Progress of filling up of backlog reserve vacancies for SC/ST:

- (i) A total of 120 no. backlog vacancies consisting of 76 no. vacancies in direct recruitment and 44 no. vacancies in promotion were identified.
- (ii) In promotional vacancies, out of 44 no. (SC-25, ST-19) backlog vacancies, all the 44 no. vacancies have been filled up.
- (iii) In direct recruitment vacancies, out of 76 no. (SC-28, ST-48) backlog vacancies, 66 nos. (SC-21, ST-45) have already been filled up. 10 no. balance vacancies (SC-7, ST-3) could not be filled in due to non-availability of suitable SC/ST candidates in earlier advertisement/ re-advertisement and subsequent interview during November 2005 and March 2006. Those 10 vacancies have again been re-advertised on 23.05.2006, interview for which is scheduled on 28.06.2006.

(B) Progress of filling up of vacant posts in Director level:

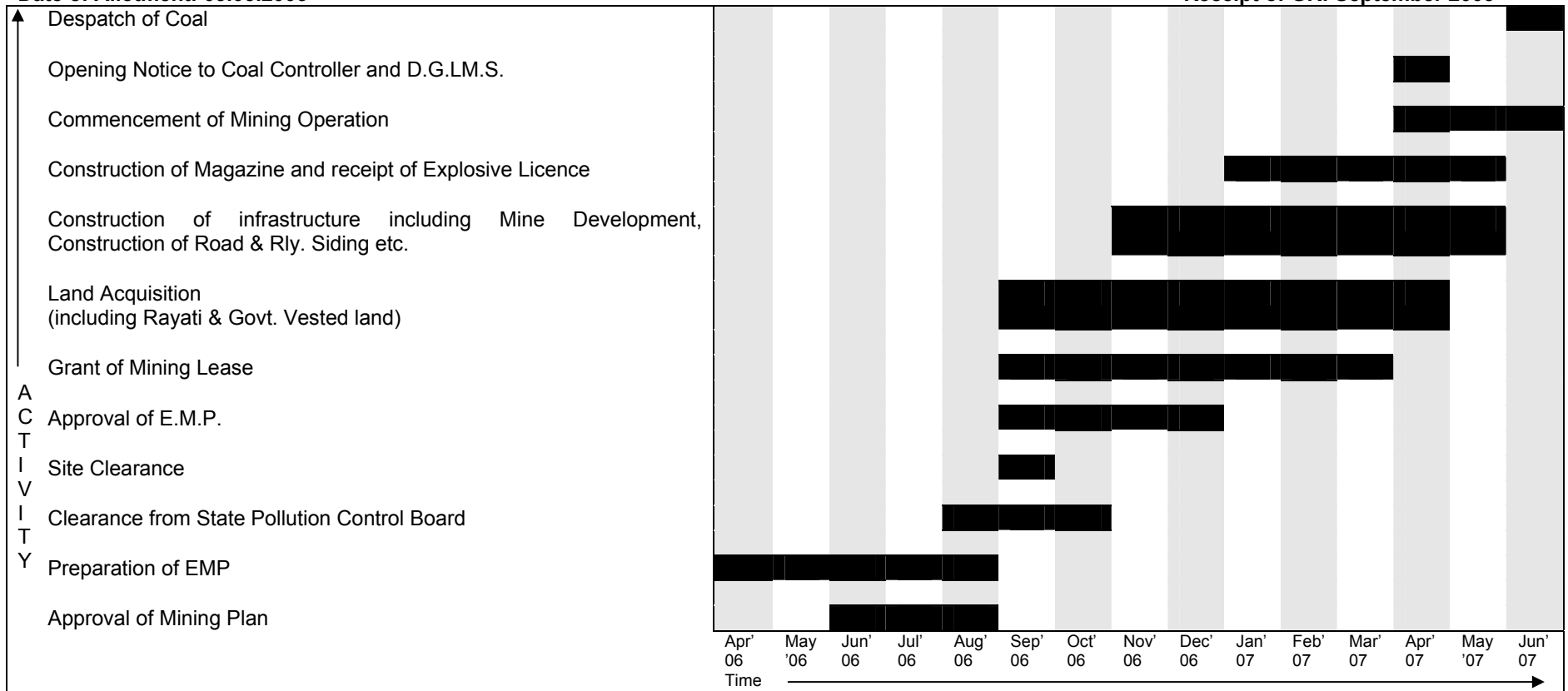
For filling up the vacant posts of Director (HRD) and Director (Commercial), advertisement has already been made on 06.06.2006, application for which shall be received upto 30.06.2006. The recruitment process is expected to be completed by 31.07.2006.

Bar Chart of Project Implementation of Captive Coal Blocks of DVC

Name of the Block: Khagra Joydev

Date of Allotment: 03.03.2005

Receipt of GR: September 2005



Note: (1) Implementation of the project as per the above schedule is subject to processing of the various applications by and receipt of approval thereof from the respective departments of State & Central Govt. within the target schedule date.

(2) The above schedule may be adversely affected for any unforeseen events beyond the reasonable control of the Project authority.

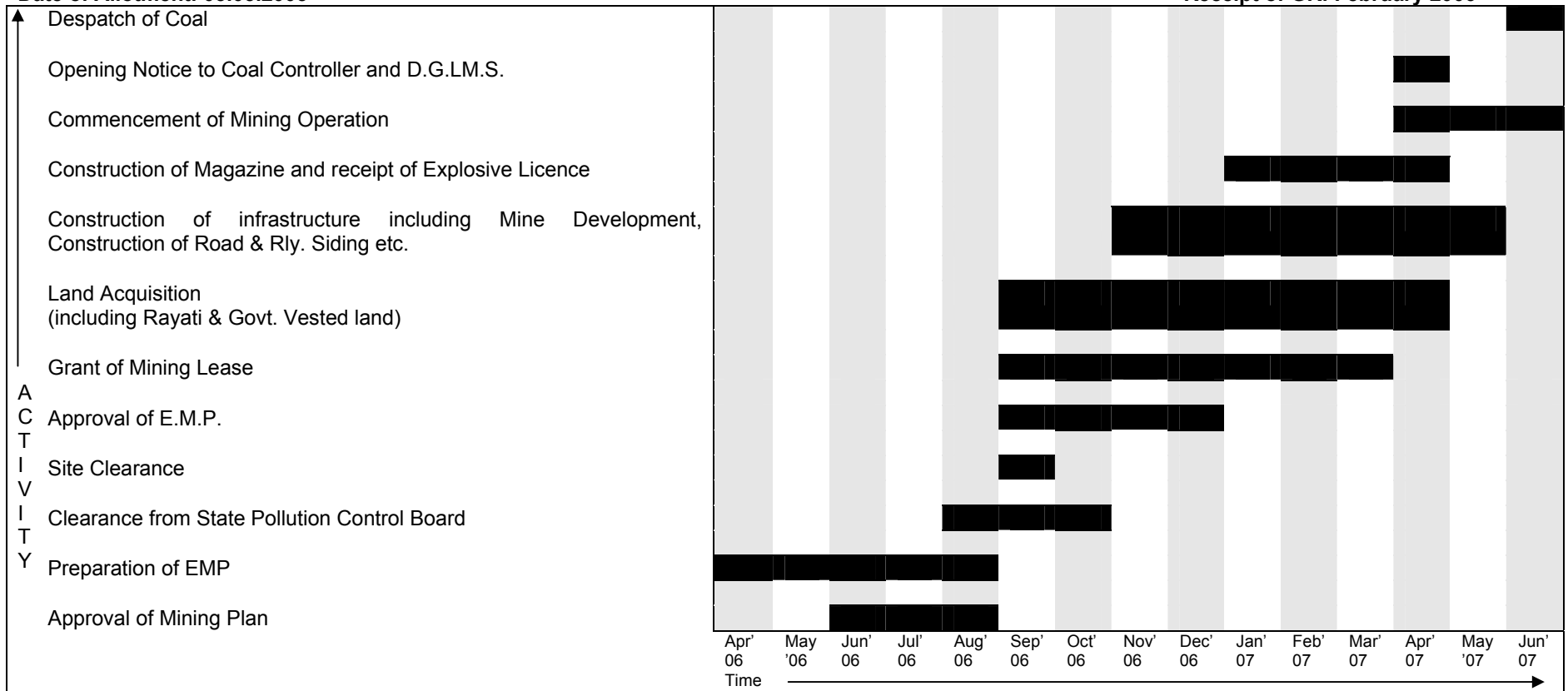
(3) There is no forest land in Khagra Joydev Block

Bar Chart of Project Implementation of Captive Coal Blocks of DVC

Name of the Block: Borjore (North)

Date of Allotment: 03.03.2005

Receipt of GR: February 2006



- Note: (1) Implementation of the project as per the above schedule is subject to processing of the various applications by and receipt of approval thereof from the respective departments of State & Central Govt. within the target schedule date.
- (2) The above schedule may be adversely affected for any unforeseen events beyond the reasonable control of the Project authority.
- (3) Schedule of Forest Land acquisition is not included above which will take a period of approximately 15 months. However, mining operation may be commenced in the non-forest land.