### MINISTRY OF POWER

## PROJECT MONITORING SYSTEM

## STATUS ENDING FEBRUARY, 2012

PROJECT NAME	GOINDWAL SAHIB THERMAL PROJECT.					
STATE/ DISTRICT	PUNJAB/TARNTARAN					
CAPACITY (MW)	2X270MW					
FUEL	PULVERISED COAL					
DATE OF REGISTRATION OF COMPANY/REGISTERED NAME OF COMPANY	( COLINE OF IND)					
ESTIMATED COST/DATE OF ESTIMATE (IN CASE OF TEC CLEARED PROJECTS, INDICATE COST AS PER TEC)	RS. 2963.81 CR.					
AWARD DATE (FOR PROJECTS UNDER ICB ROUTE)	LOI ISSUED ON 18 <sup>TH</sup> MAY,1998 BY GOVT.OF PUNJAB					
WHETHER PPA INITIALLED/SIGNED, DATE OF THE SAME	AMENDED & RESTATED PPA SIGNED ON 26.05.09.					
COST OF PROJECT.	RS. 2963.81 CR. (REVISED AFTER APPELLATE TRIBUNAL ORDER DATED 8.04.09) ESTIMATED BY THE CO.					
DEBT	80%-I.E. RS. 2371.048 CR.					
EQUITY	20% - RS. 592.762 CR.					
TOTAL	100% -RS. 2963.81 CR.					
ACTUAL EXPENDITURE ON PROJECT	ACTUAL EXPENDITURE INCURRED TILL DATE:					
DEBT	A) LAND : 167.75 CRORES      B) BTG, BOP, NON-EPC, PREPARATIVE EXPENSES, FINANCE CHARGES, (INCLUDING IDC)					
EQUITY	TOTAL AMOUNTS SPEND SO FAR UP TO -RS. 1622.50					
TOTAL	CRORES (TILL DECEMBER, 2011).					
FDI INFLOW	NOT KNOWN.					
SANCTIONS.	¥1					
ACTUAL SO FAR.	543					
COST PER MW	RS. 5.489 CR. ( BASED ON CAPITAL COST APPROVED BY THE APPELLATE TRIBUNAL)					
INDICATED TARIFF	RS. 2.94 PER KWH (TENTATIVE FOR IST YEAR)					

IST.YEAR	LEVELLISED TARIFF- RS. 2.63 (ESTIMATED)
LEVELLISED.	
STATUS OF CEA CLEARANCE	NOT REQUIRED AS CONVEYED BY GOVT. OF PUNJAB VIDE ITS MEMO NO. 10/72/95-IP(3)/2086 DATED 31.1.2001.
LIKELY DT. OF FINANCIAL CLOSURE.	THE FIRM HAS CONFIRMED THAT FINANCIAL CLOSURE HAS BEEN ACHIEVED ON 21.05.2010. IDBI IS THE LEAD LENDER.
ENVIRONMENT CLEARANCE	NOC FROM MINISTRY OF ENVIRONMENT & FORESTS, GOVT.OF INDIA OBTAINED BY THE CO. ON 23.9.1999. DUE TO DELAY IN PROJECT FRESH ENVIRONMENTAL CLEARANCE HAS BEEN OBTAINED FOR THE PROJECT ON 09.05.2008.
LAND AVAILABILITY	<ul> <li>1074.615 ACRES OF LAND HAS BEEN ACQUIRED.</li> <li>RAILWAY SIDING FROM KHADUR SAHIB TO SITE (37.03 ACRES), RIVER WATER PIPELINE CORRIDOR (1.40) ACRES.</li> <li>AWARD FOR 37.98 ACRES WAS ISSUED ON 15.07.2011, MUTATION IS IN PROGRESS. SITE POSSESSIONIS YET TO BE GIVEN.</li> </ul>
OTHER REQUIRED CLEARANCES	NOC FROM PUNJAB POLLUTION CONTROL BOARD OBTAINED BY THE CO. VIDE LETTERS DATED 30.4.1999 & 31.5.1999. ENVIRONMENTAL CLEARANCE FROM MOEF HAS BEEN OBTAINED FOR THE PROJECT VIDE LETTER DATED 9.5.08.
	<ul> <li>UNDER SECTION 29 OF ELECTRICITY SUPPLY ACT 1948. THE SCHEME WAS PUBLISHED IN THE STATE GAZETTE ON 19.2.1999.</li> </ul>
	<ul> <li>UNDER SECTION 18(A) OF THE ELECTRICITY SUPPLY ACT, 1948, ORDER OBTAINED FROM GOVT. OF PUNJAB TO ESTABLISH, OPERATE &amp; MAINTAIN THE SCHEME. FRESH PPCB CLEARANCE FOR ESTABLISHMENT HAS BEEN OBTAINED.</li> </ul>
	NOC OBTAINED BY THE CO. FROM NATIONAL AIRPORTS AUTHORITY OF INDIA VIDE LETTER DATED 21.10.1999. CLEARANCE FROM AAI FOR 275 M TALL CHIMENY HAS BEEN OBTAINED.
2	<ul> <li>NOC OBTAINED BY THE CO. FROM THE CHIEF OF STAFF, WESTERN COMMAND, CHANDIMANDIR VIDE LETTER DT. 31.8.1998.</li> </ul>
	NO OBJECTION CERTIFICATE FROM FOREST DEPARTMENT IS OBTAINED.
	SITE APPRAISAL CLEARANCE IS OBTAINED.
	FOREST DEPARTMENT CLEARANCE FOR APPROACH ROAD HAS BEEN OBTAINED VIDE LETTER DATED 23.11.2009 AND THE COMPANY HAS PAID THE NECESSARY FEE TO ISSUED THE NOC. AN AFFIDAVIT HAS ALSO BEEN SUBMITTED TO FOREST

- DEPARTMENT AS PER THE RECENTLY CHANGED GOVERNMENT RULES TO RELEASE THE NOC.
- PUNJAB STATE GOVERNMENT GUARANTEE FOR THE PROJECT HAS BEEN SIGNED ON 29.3,2001.
- THE COMPANY HAS ENTERED INTO WATER SUPPLY AGREEMENT WITH IRRIGATION DEPARTMENT, GOVERNMENT OF PUNJAB FOR SUPPLY OF 20 CUSECS OF WATER ON 29<sup>TM</sup> MARCH, 2001. REVISED AGREEMENT SIGNED ON 07.04.2010.
- ORDERS FOR MAIN PLANT EQUIPMENT (BTG PACKAGE) PLACED ON M/s BHEL ALONGWITH 10% ADVANCE PAYMENT AMOUNTING TO RS.103 CRORE. NOTICE TO PROCEED HAS ALSO BEEN ISSUED ON 29.09.09. ENGINEERING WORK FOR THE SAME IS IN PROGRESS. BOP PACKAGE HAS BEEN EXECUTED WITH M/S PUNJ LLOYD LTD.ON 14.09.09 AND ADVANCE OF RS.5 CRORE HAS BEEN PAID. ENGINEERING WORK FOR BALANCE OF PLANT IS ALSO IN PROGRESS.
- NON EPC WORK AWARDED TO M/S VERTEX PROJECTS LTD.
- COAL SUPPLY AGREEMENT EXECUTED ON 6.6.2009.
- M/S TCE CONSULTING ENGINEERS LTD., BENGALURU HAVE BEEN APPOINTED AS TECHNICAL CONSULTANTS AND M/S BARSYL ARE APPOINTED AS TECHNICAL CONSULTANTS FOR RAILWAY SIDING WORK. M/S SIRAJ AND RENU, BENGALURU HAVE BEEN IDENTIFIED FOR THE ARCHITECTURAL CONSULTACY WORK FOR PLANT, NON-PLANT AND COLONY BUILDINGS.

### FUEL LINKAGE

### A. TOKISUD NORTH BLOCK:

- TOKISUD NORTH COAL FIELD ALLOTTED AS A CAPTIVE COAL MINE AND THE DEVELOPMENTAL ACTIVITIES ARE UNDER PROGRESS.
- SANCTION OF MINING PLAN: SANCTIONED VIDE MOC LETTER NO. 13016/25/2005-CA-I DATED 05.04.2006.
- LAND ACQUISITION: ACQUIRED 452 ACRES (NON-FOREST LAND) OUT OF 480 ACRES (94%) DIRECTLY
  FROM THE OWERNS. MINING OPERATIONS CAN BEGIN
  WITH THE LAND ACQUIRED SO FAR. THE BALANCE
  LAND WILL BE ACQUIRED IN THE NEXT COUPLE OF
  MONTHS. THE COMPANY HAS REMITTED AN AMOUND
  OF RS. 2.46 CRORES AS DEMANDED BY THE STATE
  GOVERNMENT FOR TRANSFER/LEASE OF 40 ACRES OF
  GOVERNMENT LAND. FILE IS BEING PROCEESED AT
  SECRETARY LEVEL.
- FOREST CLEARANCE: THE COMPANY HAS OBTAINED STAGE-II CLEARANCE FROM MOEF VIDE LETTER NO. F.NO. 8-26/2009-FC DATED 28.12.2011 FOR DIVERSION OF 926 ACRES FOREST LAND.

- THE COMPANY IS IN THE PROCESS OF TRANSFER AND MUTATION OF THE COMPENSATORY AFFORESTATION LAND IN FAVOUR OF GOVERNMENT OF JHARKAND, WHICH IS EXPECTED TO BE COMPLETED BY MARCH'2012.
- MINING LEASE: GOVERNMENT OF JHARKHAND (GOJ)
  HAD ISSUED THE SANCTION ORDER VIDE NO.
  CO/HAZAR-25/2007/M/RANCHI DATED 17.01.2009.
  EXECUTED MINING LEASE WITH GOVT. OF
  JHARKHAND ON 05.08.2010:
- ENVIRONMENT CLEARANCE: MOEF HAD GRANTED ENVIRONMENTAL CLEARANCE VIDE LETTER NO. J-11015/430/2006-IA.II (M) DATED 24.09.2008.
- REHABILITATION AND RESETTLEMENT: R & R
  PROPOSAL WAS APPROVED BY DEPUTY
  COMMISSIONER VIDE MEETING HELD ON 07.05.2010.
  COMPLETED SURVEY FOR ELIGIBLE PROJECT
  AFFECTED FAMILIES FOR HOUSES IN R & R COLONY.
  COMPANY HAS ISSUED LETTER OF INTENT (LOI) TO
  M/S SANJAY CONSTRUCTION BOKARO, RANCHI FOR
  CONSTRUCTION OF R&R COLONY PHASE-IFOR AN
  AMOUNT OF RS.5,92,17,578/-
- BRIDGE ON RIVER DAMODAR FOR TRANSPORT OF COAL ETC. THE COMPANY PROPOSES TO CONSTRUCT A BRIDGE ON DAMODAR RIVER TO ACCESS THE COAL BLOCK FROM TOKISUD SITE AND HAS AWARDED THE WORK TO M/S NARAYAN CONSTRUCTIONS ON 10.01.2009. NOTICE TO PROCEED (NTP) WAS ISSUED ON 16.08.2010 AND OPEN FOUNDATION FOR P1 TO P4 PIERS COMPLETED AND FOUNDATION FOR P5 UNDER PROGRESS.
- RAILWAY SIDING: CONSTRUCTION OF RAILWAY SIDING IS IN FULL SWING.
- TOPOGRAPHICAL SURVEY AND BOUNDARY FIXING OF MINING LEASE AREA: 50% OF THE WORK IS COMPLETED WITH THE CO-OPERATION OF DEPARTMENT OF FORESTS.
- THE FINANCIAL BIDS FOR SELECTION OF MDO IS COMPLETED. THE AWARD LETTER IS TO BE ISSUED.

### B. SEREGARHA COAL BLOCK:

- SEREGARHA COAL BLOCK IN JHARKHAND WAS ALLOCATED TO M/S ARCELOR MITTAL INDIA LIMITED AND GVK POWER (GOINDWAL SAHIB) LIMITED VIDE MINISTRY'S LETTER NO. 38011/2007-CA-I DATED 09.01.2008.
- JOINT VENTURE AGREEMENT: JV COMPANY BETWEEN GVK POWER (GOINDWAL SAHIB) AND ARCELORMITTAL INDIA LIMITED UNDER THE NAME "SEREGARHA MINES LIMITED" WAS INCORPORATED ON 18.03.2009.
- EXPLORATION PLAN: EXPLORATION PLAN WAS PREPARED BY CMPDIL VIDE ITS LETTER NO. CMPDI/BD/C(731)/369 DATED 06.07.2009.

DATE/PRESENT STATUS OF SIGNING OF FUEL SUPPLY AGREEMENT	PURPOSE COMPANY TO DEVELOP THE PRIVATE COAL MINE BLOCK WHICH HAS EXECUTED THE FUEL SUPPLY AGREEMENT WITH GVK POWER GOINDWAL SAHIB LIMITED ON 06.06.2009.
DATE/PRESENT STATUS OF SIGNING OF FUEL TRANSPORTATION AGREEMENT	M/S GVK HAS SIGNED THE COAL TRANSPORTATION AGREEMENT WITH INDIAN RAILWAYS FOR GOINDWAL SAHIB POWER PROJECT ON 11.12.2008.
NAME OF PROMOTERS WITH	M/S GVK INDUSTRIES LTD. HAS FORMED A COMPANY
THE COUNTRY OF ORIGIN, THEIR EQUITY PARTICIPATION	M/S GVK POWER (GOINDWAL SAHIB) LIMITED TO EXECUTE THE PROJECT:
FINANCING PACKAGE PLAN	DEBT TO EQUITY OF 80: 20
EQUITY (IN MILLION)	
DEBT (IN MILLION)	
DETAILS OF ESCROW FACILITY	THE ESCROW AGREEMENT IN THE FORMAT AS AGREED BETWEEN THE PSEB, PSEBs BANKERS STATE BANK OF PATIALA AND M/S GVK HAS BEEN SIGNED BY THE THREE PARTIES ON 4.6.09.
LEAD INDIAN FINANCIAL INSTITUTION;	INDUSTRIAL DEVELOPMENT BANK OF INDIA (IDBI)

POWER EVACUATION FACILITY	TO BE COMPLETED BY PSEB 7 MONTHS PRIOR TO COD.
	ERECTION OF TRANSMISSION LINES AND SUBSTATION BAYS FOR EVACUATION OF POWER  CHIEF ENGINEER/TL HAS BEEN ASKED TO TAKE UP THE WORK OF ERECTION OF TRANSMISSION LINES FROM THE PROJECT TO THREE NOS. 220 KV SUB STATIONS AT KHASSA (AMRITSAR), BOTTIANWALA (FEROZEPUR) AND SULTANPUR (KAPURTHALA) AND CHIEF ENGINEER/SUB STATION HAS BEEN ASKED TO TAKE UP WORK OF CONSTRUCTION OF BAYS FOR THREE NOS. D.C.LINES FROM THE PROJECT TO THESE SUB STATIONS FOR EVACUATION OF POWER FROM THE PROJECT TO THE STATUS OF TRANSMISSION LINES ASSOCIATED WITH GOINDWAL SAHIB PROJECT IS AS UNDER:-
	1. 220 KV GOINDWAL SAHIB-KHASSA DC LINE
	THE ROUTE SURVEYED. THE SCOPE NEEDS TO BE REVISED AS THE SPACE FOR BAY AT KHASSA NOT AVAILABLE.
d and	2. 220 KV GOINDWAL SAHIB-SULTLANPUR DC LINE
	THE WORK OF THIS LINE IN PROGRESS. STUBBING OF 12 OUT OF 58 NO. TOWERS HAVE ALREADY BEEN COMPLETED.
	3. 220 KV GOINDWAL SAHIB-BOTTIANWALA DC
	THE SURVEY OF THIS LINE HAS BEEN CARRIED OUT, ROUTE PLANT PREPARED AND IS UNDER APPROVAL.
SIGNING OF EPC CONTRACT & EPC CONTRACTOR	BTG PACKAGE EXECUTED WITH M/S BHEL ON 06.02.2009 & NOTICE TO PROCEED ISSUED ON 29.09.2009. BOP PACKAGE AWARDED TO M/S PUNJ LLOYD EXECUTED ON 14.09.2009 AND NOTICE TO PROCEED HAS BEEN ISSUED.
SIGNING OF 0&M CONTRACT/0&M CONTRACTOR	UNDER FINALISATION BY THE CO.
GESTATION PERIOD	36/42 MONTHS FROM THE FINANCIAL CLOSURE.
[1] [1] [2] [2] [2] [2] [2] [2] [2] [2] [2] [2	FOUNDATION FOR START OF CONSTRUCTION ACTIVITY LAID ON 18.10.08. BHOOMI PUJAN FOR START OF CONSTRUCTION WORK DONE ON 9.6.2009 AND THE SAME IS IN PROGRESS.

ANTICIPATED COMPLETION WITHIN 36 MONTHS FROM THE DATE OF FINANCIAL DATE CLOSURE FOR FIRST UNIT AND 6 MONTHS THEREAFTER FOR SECOND UNIT. AS THE FINANCIAL CLOSURE HAS BEEN ACHIEVED ON 21.05.2010, THEREFORE, THE SCHDULED COMMISSIONING OF THE PROJECT IS MAY, 2013 AND NOVEMBER, 2013. OF . MAIN PLANT- BTG CONTRACT ON M/S. BHEL, PRESENT STATUS NEW DELHI. CONSTRUCTION; ACTIVITIES COMPLETED BTG SCOPE: **ACTIVITIES COMPLETED** Boiler Unit# I: Welded Joints-- 11891/13047. Structural erection - 2862/3571 MT. Pressure part erection - 2389/2640 MT. DUCT - 87 MT/ 1070 MT. Total erection - 5660 MT / 8702 MT completed. Joints Welded - 10500/10900 (for HT drain able). Total joints - 12082/14000 approx. Joints Radio graphed - 767/1900. Boiler Unit# I AUX: FANS - 28MT/77 MT. APH - 285MT/434 MT. ESP - 2456 MT / 3045 MT erection completed. Boiler Unit# II: Boiler Structural erection - 2251/3571 MT. Pressure part erection - 1306 MT/ 2640 MT.

- Boiler total erection 3556 MT / 8557 MT.
- Joints Welded 2664 / 14000.
- Joints Radio graphed 252/1900.

#### Boiler Unit # II AUX:

ESP-- 2098 MT / 3045 MT.

### Turbine & Auxiliaries-I Unit# 1:

#### Condenser

- Condenser Box preparation completed.
- Lower dome wall placed (Turbine and generator side).
- · Condensate suction line completed.

#### Turbine

- HP Module placed.
- · IP turbine placed.
- LP rotor has been inserted.

#### Generator

Base plate alignment, leveling and grouting completed.

#### Auxiliaries

- HP Heater 5 & 6 placed on its position.
- · ALL BFPs placed.
- · In MOT room, oil cooler & centrifuge placed.
- · HP flash tank placed and aligned.
- AOP, EOP and jacking oil pump placed.
- ACW,DMCW and DMCW booster pump placed.

### Electrical & C & I Unit # I

Station Transformer Placed.

#### Electrical & C & I Unit # II

· Station Transformer Placed.

#### **ACTIVITIES UNDER PROGRESS:**

- Boiler Unit #1- Structures 36 Group works, Supports erection, Right & Rear riser erection and welding, Riser supports erection, Welding of side & Front walls with header, WW fins welding & Buck stay erection, Furnace alignment, Seal box fit up & welding, Re Heater front fit up welding, Rear Arc Tube Welding.
- Boiler II- Structures 36 Group works, Platen coils welding, Down comer erection & welding.
- ESP I —Pass A- Roof Truss & Purlins erection & welding, Hoppers bottom flange welding, Collecting Electrodes rapping system, 3.5 Meter platform work.
- ESP I –Pass B- Roof Truss & Purlins erection & welding, Hoppers welding, Internal gauging &3.5 Meter platform work.
- ESP II —Pass A- Hopper welding, Bracket & shock bar alignment work.
- ESP II –Pass B- Hopper welding work.
- · MILL-E-Sole plate & mounting plate alignment

work.

- MILL-B-Sole plate & mounting plate alignment work
- MILL-A-Sole plate & mounting plate alignment work.
- · Generator- End shields blue matching.
- Condenser TG side TSP, Lower Dome walls & rear side- welding.
- Return Oil Piping Bearing pedestal drain Fit up &welding.
- Duct & Supporting Structure -Tie beam erection and welding.
- · Oil vapours piping & Supply Oil Piping header fit up.
- MOP Piping Supply & Return.
- · DMCW piping fit-up & welding.
- · ACW piping fit-up & welding.
- · BFP discharge line- pipe fit up.
- · De-aerator Overflow line fit up.
- De-aerator Over flow line fit-up. (PGMA 80-446)
- CEP Discharge to de-aerator inlet line fit-up.
- · BHEL Trichy material supply.
- BHEL Haridwar material supply.
- BHEL Bhopal material supply.
- BHEL PEM material supply.

### BOP SCOPE:

### Power House Building Unit# I:

- Grid 1-8 TG Roof Casting completed.
- .

### Power House Building Unit# II:

- Fabrication and Erection- All main column Fabrication work completed.
- Foundation casting completed.
- · CEP pit -A completed and CEP-B first lift completed.

#### TG # II

- · Condenser front handed over to BHEL.
- EOT Crane Erection completed.

#### Electrical Bay:

- Column Erection- 33 out of 36 Main columns has been completed.
- Grid 8A-10 (A to C) –Battery room Brick work completed, Plastering completed.
- Grid 8-10(A to C) +15.5 Meter floor casting is completed.
- Grid 8A-10- 3.5 meter floor casting completed. 20% brick work completed.

- Grid 8A-10- 8.5 meter floor casting completed.
- Grid 8A-10 (D to F) All main column erection work completed, CD Bay +15.5 meter floor beam erection is completed.
- Grid 10-11 (A to B) +15.5 slab casting completed.

#### Transformer Yard Foundation Work:

- GT-I, ST-I & II & UAT-I foundation handed over to BHEL.
- · GT-I- Fire wall brickwork completed
- ST-II Foundation completed. Firewall 1<sup>st</sup> Lift Column Completed.

### Mill Bay Unit# I:

- Bowl Mill-A, B & E super structure Casted.
- Fabrication & Erection Works- 16 out of 16 no's columns first lift & 13-Columns 2<sup>nd</sup>Lift completed have been completed.

### Mill Bay Unit# II:

- 10 out 16 pile cap and pedestal casting completed.
- 08 out of 16 columns first lift erection completed.

#### ESP Control Room:

- Brick Work- 3.95 to 9.2 Meter brick work completed.
- · Staircase first flight casting completed.

### Switchyard

- · Cable tray laying is in progress-95 % completed.
- Equipment Structure&Equipment Erection 430 out of 432 completed.
- · 83% earthing completed.
- Switch Yard CR- Inside and outside plastering work and false flooring completed.
- · Switch Yard Cable Trench casting work completed.
- ABT Metering room- Plastering and Grade Slab casting completed.
- Switch Yard Drainage- raft casting 770 out of 780 completed, wall casting 1544 out of 1564 completed.

### Chimney:

- Shell Casting up to 265.9 m completed.
- 01<sup>st</sup> flue can fabrication completed & 02<sup>nd</sup> flue can -

210 RM fabrication work completed.

#### DM& PT Plant:

- DM Building- 7.5 Meter slab casting completed.
- Sludge pit -Finishing & Columns casting up to roof slab is completed.
- DM Tanks (02 No's) 01 Tank- Erection& HT completed, Sand blasting work is in progress. 02 Tank- Erection work in progress, 6/6 shell erection completed.
- Inlet work for DM clarifier cascade aerator launder casting completed. Stilling chamber slab casting completed, Distribution chamber wall casting completed up to 2.5m level.
- Filter Water Storage Tank- Raft of 2<sup>nd</sup> compartment casting completed. DM water storage tank west side wall 2<sup>nd</sup> lift and east side 1<sup>st</sup> lift casting completed.
- Sludge Thickener Wall casting is completed bottom of slab.
- Main Clariflocculator- Wall casting up to ground level- 85 % completed.
- Alkali super structure work is completed. Acid Tank slab Casting completed.
- Dual Media Gravity Filter- Wall casting completed up to ground beam level.
- Degasser Blowers Foundation Completed.
- · Chemical House Footings Completed.
- Connecting channel between HRSCC FWST: Footings Completed. Column casting Completed.

### DM Plant Mechanical Work:-

- DMF-2 no's, ACF-2 no's, SAC -2 no's, WBA-2 no's, SBA-2 no's, MB-02 no's erection completed.
- Frontal piping work completed.
- Degasser Tower and tank erection completed.
- Alkali storage tank (2 no's) completed
- Alkali and acid unloading pump (4 no's) erection completed.
- DM regeneration pumps (2 no's) erection completed.
- UF feed pump (3 no's) erection completed.
- UF fast flushing pumps- erection completed.

### CST:

- Tank-1- sand blasting and painting completed, water filing completed.
- Tank-2- sand blasting and painting completed.

#### CHP-Civil works:

- Wagon Tippler 1- Hopper at (-) 0.55 Meter casting completed.
- Wagon Tippler-2- Monorail & Monorail beam casting completed.
- Stacker Reclaimer- 320 out of 1000 m casting completed.
- BCN-4- Foundation casting work completed.
- BCN-5- Foundation casting work completed.
- BCN-6- 72 % foundation casting work completed
- BCN-8- Foundation casting work completed.
- TH-3- Wall casting up to (-) 14.2 Meter completed; work in progress for slab at -13.226 meter.
- TH-1-Wall casting up to -6.4 meter completed.
- ERH- Excavation up to -9 Meter completed.
- Stock Pile Excavation & PCC completed.

#### Fabrication & Erection Work

- Structural Fabrication 2905 out of 4200MT fabrication completed.
- Trestle & gallery erection 1058 MT erected.
- JNT-2- Erection work is completed.
- JNT-3-85 % erection work is completed.
  - BCN-4- 10 % erection work is completed.
- BCN-5- 5 % erection work is completed.
- BCN-8A/B- 95% erection work is completed.
- BCN-9 40 % erection work is completed.
- Crusher House- 21 out of 21 columns first lift erection completed and 7/21 second lift completed.

#### IDCT-I:

- 6 Cells up to Fan deck bottom is completed.
- 2 cells cylinder 1<sup>st</sup> lift completed.
- Wall Beam at (-).150 M (A & D) 70 % work is completed.
- Main Beam & Transverse Beam at .650 M- 50 % Work is completed (Grid 1 to 22).
- Columns Up to .650 M to 3.460 M- 50 % work is completed (Grid 1 to 22).
- Main Beam & Transverse Beam at .3.860 M- 50 % Work is completed (Grid 1 to 22).
- Longitudinal End Wall at 7.33 M (A & D) 50 % Work is completed (Grid 1 to 22).
- Longitudinal End Wall at 9.615 M (A & D) 50 % Work is completed (Grid 1 to 22).

#### IDCT-II:

- Wall Beam at .650 M (A & D) 50 % work is completed (Grid 1 to 22).
- Main Beam & Transverse Beam at .650 M- 36 % Work is completed (Grid 1 to 12).
- Columns Up to .650 M to 3.460 M- 7 % work is completed (Grid 1 to 6x).

## CW Channel & Pipe Line:

- Civil Works- 700rm casting completed.
- Fabrication completed
- CW Pipe Erection- 1154 RM erection work is completed.
- CW Pipe Hydro test- 968 RM hydro test is completed.

### PA, FD & ID Fan & Duct Support:

- ID Fan Unit-2- Wall second Lift casting completed for Fan-B. Fan-A wall first lift casting completed.
- UNIT 2 FD Fan A Raft Completed.

## Duct Support:

ID Fan B to Chimney- foundation casting work completed.

### **FOPH Building**

- HFO & LDO Tank- Erection completed, Bottom Plate vacuum box test completed.
- FOPH Building Roof is casted, parapet wall completed, brick work 80% completed.

## Cooling Water Pump House:

- Slab casting completed.
- Fore bay Raft casting completed, Stiffener wall casting completed and Plum concrete completed.
- Fore way top raft shuttering and reinforcement U/P.
- Chlorination Building: pile cap 80% completed and column work U/P.
- Switch Gear building: 5/12 pile cap completed.

#### River Water Intake:

 Main Well- (-) 13.5 meter out of 28.5 meter sinking completed.

- Ciassion-1- (-) 26.8 meter out of 27.0 meter sinking completed.
- Ciassion-2- (-) 22.95 meter out of 28.5 meter sinking completed.
- Pier-A (-) 3.40 meter out of 28.5 meter sinking completed.
- River Water Pipe Line -265 meter raft casting is completed and 270m PCC completed.

### Raw Water Pump House:

- Fore bay wall completed.
- · Raw water channel raft completed.
- Chamber-Pump slab casting completed.

### Pipe Rack Foundation:

- Footing casting work– 40 out of 48 footing casted &76 out of 116 pedestals casted.
- Pipe Rack 8B & 8C footing casting is completed; pedestal & tie beam work is completed.

### Pipe rack mechanical

- PR-7B and 7C fabrication work completed.
- PR-88 & 8C erection completed.
- PR-7B & 7C- 50% erection completed.

### **ACTIVITIES UNDER PROGRESS**

#### Main Plant

### PHB:

- PHB Unit#1-Wall Beam encasement & Brick work at +15.5 Meter.
- PHB Unit#1-Gradeslab work at TG 0.0 meter.
- PHB Unit#1-0.0, 9.0& 15.5 Meter brick work.
- PHB Unit#2-Crane Girder, Tie Beams & vertical bracing erection.
- PHB Unit#2-Reinforcement on 9.0 m floor.
- CEP pit CEP-B second lift.
- . Grid 8A-10 (D to F)-alignment.
- TG-II +15.5 Meter Structural erection & Alignment work.
- TG-II-EOT Crane work in progress for testing and commissioning.
- Air Washer Room Foundation casting work.

#### Transformer Yard:

GT-I- Fire wall plastering work (tie beam balance).

- ST-1- 1 Firewall work.
- GT-II- Reinforcement.

### **ESP Control Room:**

- Brick Work- 0.0 to 3.95 Meter plastering.
- Brick Work- 3.95 to 9.2 Meter plastering.

### Switchyard:

- Switchyard-Fencing work (85% completed).
- Switch Yard CR- Tile flooring, painting and false ceiling and door fixing.
- · ABT Metering room-Painting work.
- Switch Yard Cable Trench top cover pre-casting work.
- · Power & Control cable laying-30 % completed.

### Chimney:

· Angel Rolling & Flue Can Joint fixing.

### **Balance of Plant**

#### DM & PT PLANT

- DM Building- 7.5 M brick Work & stair case.
- Neutralization Pit Hydro test.
- Inlet work for DM clarifier HRSCC wall work.
- Filter Water Storage Tank- North & south side shuttering under progress for 1<sup>st</sup> lift.
- Sludge Thickener- Slab work.
- Main Clariflocculator-Preparaing of slab.
- · Alkali Walk way slab.
- Dual Media Gravity Filter- Ground beam casting.
- Degasser Tower –Degasser blower foundation.
- Chemical House –Columns casting.
- Connecting channel between HRSCC & FWST-Flevated channels.

#### CHP

- Wagon Tippler-2- Hopper wall above ground level shuttering work.
- Stacker Reclaimer- Work is in progress for casting of 6 nos. of modules.
- JNT-1 –Tie beam casting.
- TH-1- Work in progress for casting of Slab at -5.2
- Stock Pile reinforcement work.
- Road side Storm drain work.

## WTP · RW Pump House-Chamber ColumnsCasting is in Progress. Raw water channel wall. CST-Tank Erection-Tank-2- water filing. CW Pipe line- Erection & encasement work. PA, FD & ID Fan & Duct Support: ID Fan Unit-2- Fan-A second lift work. Unit-2 ESP to ID & ID fan to chimney foundation work. Pipe Rack Foundation Pipe Rack 78 & 7C footing casting is in progress. Pipe Rack 3A & 3B footing casting. Pipe Rack structural fabrication work in progress, Pipe Rack-7A fabrication. NON PLANT INFRASTRUCTURE AND FACITILIES BY GVK: NON-EPC: Compound wall - Construction completed Ash pond construction is in progress. · Residential Colony work is in progress. Fire station building work is in progress. Green belt development is in progress. \* MANPOWER AND EQUIPMENT AT SITE: There are no incidents to report. There is no time lost due to injury or accident during the month. 6,001,214 man hours have been completed without any injury loss time. AS INFORMED BY THE COMPANY - RS. 1803.35 INVESTMENT MADE TILL DATE CRORES (TILL FABRUARY 2012). OTHER ISSUES a. LINKED PROJECTS (COAL, AS ABOVE GAS OR OTHERS) b. INFRASTRUCTURE LINKAGES RAIL LINKAGE COMPLETED & COMMISSIONED UPTO LOCATED ADJOINING TO GOINDWAL SAHIB. RAIL/ROAD/COMMUNICATION) KAPURTHALA-TARN TARAN ROAD. c. ANY OTHER ISSUE

#### CRITICAL AREA

- A TARIFF ORDER DATED 29.4.08 WAS ISSUED BY PSERC IN CASE OF PETITION NO.4 OF 2007 FILED BY M/S GVK FOR APPROVAL OF TARIFF IN WHICH PROJECT COST WAS APPROVED FOR RS. 2622.48 CRORES.
- THE COMPANY FILED AN APPEAL ON THE ORDER OF PSERC WITH APPELLATE TRIBUNAL FOR ELECTRICITY, NEW DELHI THE TRIBUNAL GAVE ITS JUGDEMENT VIDE ORDER DATED 8.04.09. THE ESTIMATED COST OF THE PROJECT AS PER ORDER OF THE APPELLATE TRIBUNAL IS RS. 2963.81 CR.
- THE PSERC HAS ISSUED ORDER DATED 6.03.09 IN THE CASE OF PETITION NO. 3 OF 2007 FILED BY PSEB FOR APPROVAL OF AMENDED & RESTATED PPA WITH M/S GVK.
- M/S GVK HAS FILED AN APPEAL IN THE APPELLATE TRIBUNAL AGAINST THE ORDER OF PSERC DT. 6.3.09 AND ALSO FILED AN INTERIM APPLICATION FOR ALLOWING THEM TO SIGN THE PPA WITHOUT PREJUDICE TO THEIR RIGHT OF APPEAL. THE HEARINGS OF THE APPEAL AND INTERIM APPLICATION WERE HELD ON 30.4.09 AND 19.5:09. THE APPELLATE TRIBUNAL ISSUED AN INTERIM ORDER DATED 19.5.09 GIVING LIBERTY TO BOTH THE PARTIES FOR SIGNING THE PPA AS PER THE ORDER OF PSERC.
- THE AMENDED & RESTATED PPA HAS BEEN SIGNED ON 26.5.09 AS PER THE ORDERS OF THE COMMISSION AND APPEAL HAS BEEN DISMISSED BY THE TRIBUNAL VIDE ITS ORDER DATED 13.01.11.

#### AREAS OF CONCERN

#### AREA OF CONCERN:

- Construction Power Supply Tariff is being charged under "Temporary power Supply category" – A costly inconvenience - Request PSPCL to re-consider
- Due to change of law Entry tax is being imposed on the project material at Punjab border. Due to this there will be an increase in project cost by about 10%.
- Soil improvement through vibro compaction is increasing the project cost.
- Excess length of pile than envisaged is increasing the project cost.
- Increase in soil filling quantity due to heavy settlement during vibro compaction.
- Increase in cost of railway siding as approved by Northern Railways.
- Continued inclement weather conditions and rains affected work progress during the month.
- Delay in material supply from BHEL Trichy is affecting BTG work progress adversely in Unit#2 for the last 7 months. Unit-1 hydro test is getting delayed due to delay in welding completion by BHEL.
- Railway corridor land possession is yet to be given and it results in delaying the railway siding work.

PRESENT ADDRESS OF THE COMPANY	'PAIGAH HOUSE', 156-159, SARDAR PATEL ROAD, SECUNDERABAD- 500 003. ANDHRA PRADESH, INDIA				
TELEPHONE NUMBER & FAX NO.	Off: 91-40-27902663, 64 Fax: 91-40-27902665				
ANY ASSISTANCE REQUIRED.					

TALWANDI SABO THERMAL POWER PROJECT					
Name of the Power Project	Capacity	Scheduled COD	STATUS OF THE PROJECT		
Talwandi Sabo TPP	1980MW(Gross)				
Unit-1	660MW	31.08.2012			
Unit-2	660MW	31.12.2012	As per the enclosure-I		
Unit-3	660MW	30.04.2013			
Date of clearance by State Govt.	9/2006				
Est. approved cost					
Expenditure up to handing over the Power Project to the Successful bidder.	Appx. Rs.387Cr				
Financial closure	As per provisions of Power Purchase A TSPL have not ac Financial Closure	greement the chieved the	1 3		
Type of Fuel	Coal		3.6		
Fuel linkage	7.72MTPA by Ma Field Limited—fro Coalfields				
Date of main plant order	18.07.2009 EPC contract M/S SEPCO El Construction Jinan,Shandon Chin	placed on lectrical Power Corporation, a.			
Power Evacuation	This system will by erstwhile PSEB (now TRANSCO)				

## 3x660MW(1980MW) Talwandi Sabo Thermal Power Project.

- 3X660 MW(1980MW) is being developed at village Banawala, Distt. Mansa by Talwandi Sabo Power Limited (owned by M/s Sterlite Energy Limited w.e.f 01.09.2008, the date of PPA). The project is being developed on "BOO" basis under Case-2 through tariff based International Competitive Bidding process as per bidding guidelines issued by Ministry of Power, Govt. of India.
- As per PPA, the Scheduled Commercial Operation Dates (CoDs) of 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> units are 31.08.2012, 31.12.2012 & 30.04.2013 respectively. However, TSPL have intimated that the actual CODs will be 08.11.2012, 08.02.2013 & 10.06.2013 respectively.

■ EPC- Contract:

M/s SEPCO Electric Power Construction Corporation, Jinan,

Shandon, China.

Coal linkage:

M/s Mahanadi Coal Fields Ltd. Sambalpur have already issued LOA

to TSPL on 14.08.2008 for 7.72 MTPA coal linkage--Grade is E/F.

■ Fuel Supply Agreement: Yet to be signed by the TSPL.

■ Water Linkage: 100 cusec water linkage obtained from Kotla branch.

■ Land acquisition: 2113 acres of land acquired near Villages Banawala, Distt. Mansa.

193 acre land for rail and water corridor has been acquired.

Overall progress of the project : 55%

### A) TSPL have intimated that:-

» Major equipments for Main plant, BOP, Coal Handling Plant, Switchyard, Ash Handling Plant, others auxiliary & essential packages ordered. Approx.1,00,000MT material dispatched from China and nine cargos from third countries.

### Activities completed:-

» Infrastructure Work: Road diversion and Street lighting work completed.

» Civil Works:

Test piling, Soil investigation, Area grading in main plant area completed. Piling work in Main Plant Area, Piling work in Boiler #1,#2 &#3,ESP#1,#2 & #3,Pile testing in Boiler-2 area, DM plant piling, Switch-yard, Main Power House & Chimney piling completed, piling work in CHP area and NDCT Unit#2(Shell) piling work completed. Boiler-1&2, DM plant & switchyard foundation work, Chimney raft foundation and Chimney slip form erection completed.

BOP

NDCT Unit # 1,2&3 (Internal & External) piling work, NDCT#2 ring foundation & pedestals for raker column completed. Water purifying house completed, CWPH raft foundation work completed. Inclined plate filter----Wall construction completed.

i) Activities under Progress:-

» Infrastructure Work: Plant Boundary wall work and Transit hostel work in progress.

» Civil Work:-

MPH-1 foundation work in progress, MPH 2 foundation work-85% completed and NDCT 1&3 ring foundation work and NDCT 3 raker column and ring beam construction in progress. Boiler#3 foundation work and Chimney shell contruction in progress. Chimney#2 flue can fabrication—30% completed

Wagon tippler foundation work- Raft foundation completed, wall casting in progress.

Crusher house and CSR foundation work:- Foundation work completed.

Raw water reservoir: Earth work and embankment completed and PVC pipe & HDPE sheets laying in progress. Bridge construction in progress.

Railway siding work..—Inplant yard track laying completed, Out plant yard 29tkm earthwork completed, blanketing in progress, Bridges construction in progress.

HCSD system:- 70% completed .

Inclined plate filter:-Wall construction, in progress.

» Mechanical Work:-

CW pipes erection:- in progress. Boiler 2 erection:-40% pressure parts welding completed. Boiler-1 erection:- Ceiling girder erection completed, pressure parts welding in progress.

DM plant:- Equipments erection in progress. Switchyard erection:- Gantry steel structure erection completed and the 50% equipment structure erection in progress. NCB/CCB:- Structure erection in progress.

Boiler 3 erection:--1<sup>st</sup> tier erection completed.

# ii) Other Supporting Infrastructure & Facilities:

» Railway link & siding

· ESP approval in progress by Northern Railways.

Out plant bridges, RUBs & culverts work & Outplant yard track laying in progress.

» Water conveyance

- Pump house and buffer tank civil works in progress. Pipe laying in progress.
- Overall 50% progress achieved.

» Water reservoir

- Excavation work completed. Precast tiles & PVC pipe & HDPE laying in progress.
- » High concentration slurry disposal:--Tank fabrication and erection and pump house civil work is in progress.

Manpower & Equipments:- About 4900 manpower working at site and appx.100,000MT material dispatched from China.

- B) Following Twin Moose DC on DC lines of 400 KV approved for evacuation of power:
  - a) 440 KV Talwandi Sabo to 400 KV Nakodar with LILO of one Ckt at 400 KV PGCIL Moga.

b) 400 KV Talwandi Sabo to 400 KV Mukatsar.

c) 400 KV Mukatsar to 400 KV Mastewal (Makhu). 400 KV Talwandi Sabo to 400 KV Dhuri.

d) 400 KV Mastewal to 400 KV Bala Chak Amritsar.

The evacuation lines have been ordered for execution by M/s PGCIL.

RAJP	URA THERMAL	POWER PRO	JECT
Name of the Power Project	Capacity	Scheduled COD	Present status of the Project
Rajpura Thermal Power Project	1400MW (Gross)		As per the enclosure-I
Unit-1	700MW*	Jan, 2014	The per une emelocate t
Unit-2	700MW*	May,2014	
Date of clearance by State Govt.	State Govt. had cle project in 9/2006	eared the	
Est. approved cost	· · · · · · · · · · · · · · · · · · ·		f. s
Expenditure up to handing over the Power Project to the Successful bidder.	Appx. Rs.542 Cr		
Financial closure	Documents submit		
Type of Fuel	Coal		
Fuel linkage	5.55MTPA from So Coalfields Limited Korba Raigarh field	(SECL) -from	<b>y</b>
Date of main plant order	EPC contracts signe Larsen & Toubro L 16.07.2010 with eff contract as 18.01.10	ed with M/s td. on fective date of	
Power Evacuation	Facility to be proverstwhile PSEB (now TRANSCO)		

<sup>\*</sup> Unit configuration changed by the developer from 2X660MW to 2X700MW as per provisions of the PPA  $\,$ 

## Development Status of Rajpura Thermal Power Project for February, 2012

### 2x700MW(1400MW) RAJPURA THERMAL POWER PROJECT

2X700MW(1400MW) Rajpura TPP is being developed at village Nalash near Rajpura Distt. Patiala by Nabha Power Limited (owned by M/s L & T Power Development Limited w.e.f 18.01.2010, the date of PPA). The project is being developed on "BOO" basis under Case-2 through Tariff based International Competitive Bidding process as per bidding guidelines issued by Ministry of Power, Govt. of India.

- The CODs of 1st & 2nd Units of the project are 17.01.2014 & 17.05.2014 respectively.
- EPC contractor:
- M/s Larsen & Toubro Ltd.(date of award is 16.7.2010)
- M/s South Eastern Coalfields Ltd. Bilaspur (Chhatisgarh) issued Coal linkage: Letter of Assurance to NPL on 11.12.2008 for the coal linkage of 5.55 MTPA (Grade-F).
- Fuel Supply Agreement: Yet to be signed by the NPL.
- Irrigation Deptt., Punjab Govt. allocated water linkage on 09.05.2008 Water Linkage:
  - & 14.07.2010 (for the revised capacity of 2x700 MW).
- Land acquisition:
- 1078.16 acre of land acquired for the main plant. Railway corridor:-Land acquisition for railway corridor 126.65 acre is
  - under process.
- PO issued to L&T-Railway Business Unit for Design, Engineering, Railway Corridor:
  - Const. & Commissioning of Railway siding. L&T-Railway Business Unit started mobilization at site and 'railway siding embankment work started inside the plant area. Procurement of Ballast and sleepers started and blanketing inside plant in progress. Detailed Project Report (DPR) for Railway infrastructure scheme approved
  - on 19.9.2011.
- Overall progress
- 33%
- i) Major milestones/Activities intimated by NPL:-
- » DPR for 2X700MW finalized.
- » Major equipment for main plant, BOP, Coal Handling Plant, Ash Handling Plant, others auxiliary & essential packages ordered.
- » Amendment in MOEF clearance for the 1400MW Raipura TPP received on 15.11.2010
- » Renewal of "NOC" from Punjab Pollution Control Board obtained, valid up to 19.09.2013.
- » Tata Consulting Engineers (TCE) Ltd. appointed as Owner's Engineer.
- » Soil Investigation, Contour & Topographical Survey completed.
- » Due to change in Unit configuration, application for additional coal linkage submitted to Ministry of Coal, Govt.of India on 25.5.2010. Standing linkage committee (SLC) in its meeting on 18.4.2011 has approved enhancement of capacity to 2x700 MW.
- » Approval for Change in Land Use obtained from Chief Town Planner, Pb on 10.06.2010.
- » Design & Engineering work in progress- Approximately 85% completed.
- » Construction Power—11kV line from Sarai Banjara Sub-station energized.

			Physical Progress			
Šr No.	Name of Work	UOM .	Cumulative upto 31 <sup>th</sup> Dec.2011	During Month of Jan. 2012	Cumulative till 31th Jan.2012	
Α .	CIVIL					
1	PILING	Nos				
II	PILE CAP / FOUNDATIONS					
	UNIT#1					
	Boiler, ESP,Fan etc.		6,062	85	6,147	
	Mill Bay		4,473	334	4,807	
	STG & Auxiliaries		7,737	384	8,121	
4.	NDCT Raft		9,757	494	10,251	
	UNIT#2		• • •			
	Boiler , ESP ,Fans, etc		3,932	655	4,587	
	Mill Bay	CUM	4,044		4,044	
	STG & Auxiliaries			944	944	
8	NDCT Raft			1,140	1,140	
	COMMON SYS					
9.	Chimney		12,325	964	13,289	
10.	Service Building		647	22	669	
11.	Control Room		1,467	-	1,467	
12.	SW Yard Foundations	Nos	207		207	
	MISCELLENEOUS					
13.	Plant Roads WBM	Sqm	21,525	-	21,525	
14.	Misc. RCC	cum	2,449	3,050	5,499	
В	STRUCTURAL					
	FABRICATION					
	STG Bldg#1		4,213	66	4,279	
	Control Room Bldg.	Tons	1,210	52	1,262	
	Bunkers#1		594	90	684	
4.	STG Bldg#2		1,722	476	2,198	
11-	ERECTION	100				
1.	STG Bldg#1		1,546	320	1,866	
2.	Control Room Bldg.		698	172	870	
III	BOILER #1 STRUCTURE ERECTION	Tons	7,289	549	7,838	
V.	BOILER # 2 ERECTION		1,279	852	2,131	
	CW PIPE(2550-3750)		.,=	002	2,131	
	Rolling	Mtr	1,390	187	1,577	
	Welding	· Mtr	1,312	210	1,522	

					Fes	,2012
c	RAW WATER RESERVOIR					
- 1	Excavation		CUMx10^3	20,73,621	5,175	20,78,796
II	Embankment		CUMx10 <sup>3</sup>	2,69,572	3,250	2,72,822
111	Laying of precast tiles		SQM	2,39,394	25,654	2,65,048
D	RLY SIDING IN PLANT					
- 1	Earth work		CuM	1,53,000		1,53,000
· II	Blanketting		CuM ·	61,000		61,000
III	Ballast		CuM	6	4 .	10
E	COAL HANDING		2			
.1	RCC .		CUM	5,387	2,899	8,286
- 111	Fabrication(Welding)	-	Tons	476	524	1,000

ii) EVACUATION OF POWER:-

The evacuation of power on 400 KV DC Twin-Moose lines shall be as under:

» Rajpura Thermal to Rajpura 400 KV Sub Station. Rajpura to 400 KV Dhuri, Rajpura to 400 KV Nakodar, Nakodhar to 400 KV Mastewal.

The transmission lines shall be erected by PSTCL.

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