GLOBAL NOTICE INVITING EXPRESSION OF INTEREST NO: VSP/WC/BF/50034-0/EOI/2010–2011
DATED 10.05.2010

VISAKHAPATNAM STEEL PLANT INVITES “EXPRESSION OF INTEREST” ON GLOBAL BASIS FOR THE WORK OF “TECHNOLOGICAL ASSISTANCE FOR BLOWING-OUT OF BLAST FURNACE-1 AND SUBSEQUENT BLOWING-IN” FROM COMPETENT AGENCIES WHO ARE HAVING THE REQUIRED EXPERTISE & EXPERIENCE.

The details regarding Technological Assistance required for blowing-out of BF-1 and subsequent blowing-in are placed along with this Notice in VSP’s website www.vizagsteel.com

Prospective Agencies may submit their “EXPRESSION OF INTEREST” with all relevant details and supporting Documents as mentioned in QUESTIONNAIRE on or before 15th June 2010 by Registered post/Fax/Courier to the Dy General Manager – Works Contracts l/c, Visakhapatnam Steel Plant, Visakhapatnam – 530 031, India. For any queries Sri S.Raghu AGM (works contracts) may be contacted through his e-mail address sraghu@vizagsteel.com

Dy General Manager - Works Contracts l/c
TECHNICAL SPECIFICATION FOR
TECHNOLOGICAL SUPERVISION/ GUIDANCE
FOR LONG TERM SHUTDOWN WITHOUT
SALAMANDER TAPPING AND SUBSEQUENT
SUCCESSFUL BLOWING IN OF BLAST FURNACE
OF VSP.
Introduction

Visakhapatnam Steel Plant (VSP) owned by Rashtriya Ispat Nigam Limited (RINL), India is producing about 4.0 million tones of hot metal per annum (mtpa) from their existing 2 Blast Furnaces. VSP is operating BF-1 since March, 1990, BF-2 since April, 1991. VSP intends to carry out the shut down of one of the Furnaces for few months and then restart it again.

The present status of Blast Furnace-1 of VSP is given in Technical Specification No. VSP-BF.1 CR-PRI-001 for BF-1 which is available with the bidders.

VSP prefers the long term shut down of one of the furnaces with out salamander tapping and keeping metal in hearth in liquid/ semi liquid condition. However long term shut down of the furnace with complete salamander tapping can also be considered. The methodology to be adopted will be finalized during the technical discussions after the offers are received. The parties may quote for one or both methods as per their experience.

This specification covers design, engineering, supervision of execution of activities leading to long term shutdown of one Blast Furnace of VSP and its auxiliaries like Stoves, GCP, cooling water, utilities, dust catcher, gas lines etc., Supervision of shutting down the furnace and its auxiliaries, monitoring the furnace during the shutdown period, supervision of restarting the furnace and stabilizing the furnace for normal activities.

The bidders should specify in their offer the safe period of shutting down the furnace in each methodology recommended by them after which the furnace can be revived for normal operations.
Scope of Work:

The following will be the scope of work of successful bidder:

A. Study

To study the present physical condition and operating conditions of the condition of the both Blast Furnaces of VSP and submit the recommendations with justifications to VSP for selecting one furnace for long term shutdown. Also bidders to prepare and submit a detail document with activity chart, basic data, engineering/technology for long term shut down and restarting activity up to stabilization.

B. Pre shut down activities

i. To prepare and submit a document and detailed activity chart for preparation activities, for shut down of the furnace and its auxiliaries for a specified period.

ii. Providing basic data and basic engineering and procedure with safety instructions etc. for long term shut down of the furnace (Preparation activity and shutdown procedure). Requirement of special burden (Blowing-out burden) and special equipment, tools and tackles is to be indicated along with basic data.

iii. Supervision of execution of preparatory activities by VSP for successful blowing down of furnace.

iv. Checking of all activities and giving clearance for long term shut down of furnace.

C. Shutdown activities

i. Total supervision of preparing the furnace for long term shut down (Special burden charging, burden lowering and subsequent activity etc.,).

ii. Total supervision of shutting down of the furnace.

D. Furnace monitoring

i. The furnace will be monitored during the shutdown period continuously for stable condition of all the parameters. Monitoring and corrective actions if any will be carried out by VSP based on the document to be provided by the bidder (Procedure for monitoring and shutdown). The bidder’s personnel shall be
associated with VSP personnel in daily monitoring of the critical check points/parameters of the furnace and suggest corrective actions required to keep the furnace in stable condition during shutdown period. A weekly report on the condition is to be submitted to VSP on the condition of the furnace.

E. Restarting of the Furnace
   i. To provide all details of preparatory activity before blowing in furnace.
   ii. To provide basic data engineering/technology, procedures with safety instructions for blowing-in furnace (Blowing-in procedure). Also to provide blowing-in burden details with justification/calculations.
   iii. Total supervision of execution of preparatory activities by VSP for successful restarting of furnace.
   iv. Checking of all activities and giving clearance for restarting of furnace.
   v. Total supervision of preparing the furnace for restarting (Special/controlled burden charging, controlled hot blast etc.).

F. Stabilizing the furnace
   i. After successful restarting and normalizing the furnace for normal production the furnace is to be monitored for a mutually agreed predetermined period for continuous smooth operation of the furnace.
RASHTRIYA ISPAT NIGAM LIMITED
VISAKHAPATNAM STEEL PLANT

DETAILS OF BF-1

Designer: GIPROMEZ, MOSCOW
Useful Volume : 3200 m³
Hearth dia: 12 mts
No. of tuyeres: 32
No. of tapholes : 4
No. of Hot Blast Stoves : 4
Oxygen enrichment : 1.5%
Auxiliary fuel injection : NO (All coke operation)
Productivity : 2.0 - 2.1 t/m³/day
Type of cooling system: Furnace walls – Stave cooling
Furnace bottom- Air cooling
Type of cast house: Circular
Hearth refractory details : Bottom – Graphitized Carbon blocks
Side walls - Carbon blocks
Hearth pad – Mullite blocks
Commissioning date : 28.03.1990
Category- II repair done : June 2000 (13064579T)
Production till April 2010 : 31911885T
QUESTIONNAIRE FOR

Technological supervision/guidance for long term shutdown without salamander tapping and subsequent successful blowing in of BF-1 of Visakhapatnam Steel Plant

Job description: This job involves technological supervision/guidance for long term shutdown without salamander tapping and subsequent successful blowing in of Blast Furnace no.1 of Visakhapatnam Steel Plant.

The Agency should submit the following details:

1. Name of the Agency:
   Address of the Agency:

2. Details of experience w.r.t long term shutdown without salamander tapping and subsequent successful blowing in of Blast Furnaces (particularly for blast furnaces of useful volume of 2500 m3 and above)
   - Name of plant
   - Furnace details
   - Year of execution of the job
   - Performance of the BF after blowing in
   - Any other details

3. Evidence w.r.t point no.2:

4. Detailed description of the job to be executed: Detailed description of the following activities are to be given
   - Preparatory jobs for shutting down the furnace.
   - Methodology of shutting down of the furnace.
   - Monitoring of the furnace during the shutdown period and the corrective actions required.
   - Revival of the furnace back to normal operation.

5. Confirmation of scope of work as per enclosed document (Any exclusions should be indicated separately)

6. No. of experts to be deployed:
   I. For preparatory jobs
   II. During blowing out
   III. For monitoring after shutdown
   IV. For blowing in and stabilization

7. Terms and conditions:
8. Special conditions:
9. Safety measures:
10. Additional information if any: