

## NTPC - SAIL POWER COMPANY PVT.LTD.

CORPORATE CONTRACTS & MATERIALS, NEW DELHI

Salient Tech. **Features** 

## SALIENT TECHNICAL FEATURES REPLACEMENT / RENOVATION OF RAPH (ROTARY AIR PREHEATER) OF BOTH UNITS AT NSPCL ROURKELA CPP-II (2X60 MW)

Salient Technical Features of the works covered in IFB no. CC/C&M/C-308 are mentioned below. These Salient Technical Features are mentioned only to facilitate prospective bidders to prime-facie understand the requirements under the tender and shall not in any way limit or alter the Scope of Work and Technical Features / Specification of Works covered in the Bidding Documents. Detailed provisions in regard of Scope of Work and Technical Features / Specification of Works, contained in the bidding document shall be final and binding.

## INTRODUCTION

Rourkela Captive Power Plant-II is one of the three stations of NSPCL-SAIL Power Supply Company (P) Limited (A joint venture Company promoted by NSPCL & SAIL). NSPCL- Rourkela comprises of 2x60 MW coal fired units. The units (2 x 60 MW) were progressively commissioned from 1987 to 1988. This plant is situated in the Sundergarh District of Odisha State. The plant is located near river Bramhani.

Approach to Site: The nearest Rail Head is Rourkela Railway Station of South Eastern Railway, at a distance of about 2 Km from the Power Station. The Rail and Road distances of the Power Station from the major cities are as follows.

Sl. No.	Power Station to Particular	Distance in KM.	
	Place	Rail Access	Road Access
1	Rourkela	-	20
2	Jamshedpur	120	120
3	Kolkata	555	494
4	Ranchi	173	170
5	New Delhi	2181	1716

## **BRIEF SCOPE OF WORK**

The R&M scope of work for the equipment, material and system shall include design, engineering, re-engineering, manufacture / refurbishment / retrofitting, fabrication, assembly, pre-shipment testing at manufacturer's works, proper packing for transportation, delivery at plant site, unloading, storage, installation, interconnection with existing plant and equipment, calibration, testing, commissioning and putting them in service.

The scope of work envisaged for replacement / renovation of existing Regenerative Rotary Air Pre Heater (RAPH) with New Regenerative Rotary Air Pre Heater (RAPH) of efficient design in the same space consists of two numbers RAPH per Boiler and total four (4) nos. of two Boilers of NSPCL Rourkela CPP-II (2x60MW). Complete dismantling of existing RAPH and shifting them to designated place of the plant is in party's scope. Associated modification of existing ducting & expansion joints and integration of existing equipment is also in the bidder's scope. Efficient design means that the Flue gas temp. at RAPH exit to be achieved in the range of 130 deg C and air ingress to be reduced to below 10%. This shall be demonstrated under Performance Guarantee Testing.

All Electrical &control & instrumentation work up to owner's DDCMIS is to be done by party. Permanent fire fighting system inside of RAPH shall be provided by party. The necessary mandatory spares shall also be supplied along with the main order.