



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

( भारत सरकार का उपक्रम )

**BHARAT HEAVY ELECTRICALS LIMITED**

(A Govt. of India Undertaking)

**TCN – 02**

Ref: PSER:SCT:SNG-M1429:TCN-02

Date: 16-03-2013

Sub	Tender Change Notice (TCN-02).	
Job	Design, engineering, manufacturing, supply/ delivery, erection, commissioning, trial run, handing over to customer etc. of Ventilation System for 2x600 MW unit at Singareni STPP, Adilabad,A.P.	
Ref	01	Tender No. PSER:SCT:SNG-M1429:13.
	02	BHEL's NIT, vide reference no PSER: SCT:SNG-M1429:3128, dated 06-02-2013.
	03	BHEL's TCN-01, vide reference no PSER: SCT: SNG-M1429:TCN-01, dated 21-02-2013.
	04	Other references (if any).

With reference to above, following points, relevant to tender, may please be noted and complied with while submitting offer.

- 1.0 Due date of submission of offer is extended from 18-03-2013 to **02-04-2013 (14-00 hrs)**. Bidders are requested to submit their offer by extended due date positively.
- 2.0 **BOQ cum price schedule format VOL-III, PRICE SCHEDULE, REV-0** has been revised as **VOL-III-PRICE SCHEDULE, REV-01** which is enclosed herewith. As such you are requested to consider the revised BOQ/price schedule only and quote your price accordingly. Offer from bidders in superseded price schedule (Vol-III, REV-0) shall not be considered. Bidders are also requested to submit a declaration in techno-commercial offer that they have submitted their price bid in sealed envelope as per **REVISED price schedule format (VOL-III , PRICE SCHEDULE , REV-01)**.
- 3.0 Amendment/ Modification to tender terms as per attached **Annexure-A**.
- 4.0 Revised 'No deviation certificate' is attached. Bidder to submit 'No deviation certificate' as per attached format only.
- 5.0 All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,  
for BHARAT HEAVY ELECTRICALS LTD

ENGINEER (SCT)

Encl

1.0 As above.

पावर सेक्टर पूर्वी क्षेत्र ( मुख्यालय )

POWER SECTOR EASTERN REGION, DJ-9/1, SALT LAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960

फोन/Phone : बोर्ड/EPABX : 23211798/ 1691

**FORMAT FOR NO DEVIATION CERTIFICATE**  
**(To be submitted in the bidder's letter head)**

BHARAT HEAVY ELECTRICALS LIMITED,  
Power Sector - Eastern Region,  
Plot no 9/1, DJ Block, Sector – II, Salt Lake City,  
Kolkata – 700 091

Sub	No Deviation Certificate.	
Job	Design, engineering, manufacturing, supply/ delivery, erection, commissioning, trial run, handing over to customer etc of Ventilation System for 2x600 MW unit at Singareni STPP, Adilabad,A.P.	
Ref	1.0	Tender No. PSER:SCT:SNG-M1429:13.
	2.0	BHEL's NIT, vide reference no PSER: SCT:SNG-M1429:3128, dated 06-02-2013.
	3.0	BHEL's TCN-01, vide reference no: Ref: PSER:SCT:SNG-M1429:TCN-01, Dated 21.02.2013.
		BHEL's TCN-02, vide reference no: Ref: PSER:SCT:SNG-M1429:TCN-02, Dated 16.03.2013.
	5.0	Other references (if any).

Dear Sirs,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorised  
representative of the contractor)

पावर सेक्टर पूर्वी क्षेत्र ( मुख्यालय )

POWER SECTOR EASTERN REGION, DJ-9/1, SALT LAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960

फोन/Phone : बोर्ड/EPABX : 23211798/ 1691

JOB	Design, engineering, manufacturing, supply/ delivery, erection, commissioning, trial run, handing over to customer etc of Ventilation System for 2x600 MW unit at Singareni STPP, Adilabad,A.P.
TENDER NO	PSER:SCT:SNG-M1429:13

SL NO	CLAUSE NO.	AMENDMENT/ MODIFICATION TO TENDER TERMS SUPERSEDING EARLIER ONE
1.0	<b>VOL-IC-SCC(SUPPLY) CLAUSE NO. 20.1 (LIQUIDATED DAMAGE)</b>	If vendor fail to complete the job as per aforesaid completion period, BHEL shall have the right to recover as liquidated damages (LD) a sum equivalent to 0.5 % of the contract price, including taxes, duties of contract price (supply part) for delay of each week. The liability for delay shall not in any case exceed 10 % (Ten percent) of the contract price, including taxes, duties (supply part )
2.0	<b>VOL-ID -SCC(SERVICE) CLAUSE NO. 20.1 (LIQUIDATED DAMAGE)</b>	Subject to force majeure, if vendor fail to complete the scope of tender within aforesaid completion period, BHEL shall have the right to recover as liquidated damages (LD) a sum equivalent to 0.5% (One quarter percent) of the contract price, including taxes, duties etc (service part of the price schedule) for delay of each week or part thereof. The liability for delay shall not in any case exceed 10% (Ten percent) of the contract price, including taxes and duties (service part of the price schedule).
<b>3.0</b>	<b>General</b>	
3.1		Bidder shall submit offer strictly in compliance with technical specification and tender terms along with amendment/ clarifications issued till date within the due date.
3.2		All other terms & conditions shall remain unchanged.

<b>VOLUME-III PRICE SCHEDULE, REV-01</b>	
<b>Design, engineering, manufacturing, supply/ delivery, erection, commissioning, trial run, handing over to customer etc of Ventilation System for 2x600 MW unit at Singareni STPP, Adilabad,A.P.</b>	
<b>TENDER NO PSER:SCT:SNG-M1429:13</b>	
<b>PREAMBLE</b>	
01	This preamble forms part of tender document and schedule of items. The tenderer should read this preamble carefully in rates for various items. Clauses under this preamble shall be read in conjunction with Volume-IA, Volume-IB, Volume-IC, Volume-ID, Volume-II together with subsequent changes/ modifications etc thereto as applicable as on date of submission of price offer.
02	The work shall be carried out strictly as per specifications, description of the items in these schedule and/ or engineer's instructions.
03	Items of work provided in this schedule but not covered in this specification shall be executed strictly as per instruction of the engineer.
04	Unless specifically mentioned otherwise in the tender document, the tenderer shall quote for the finished items and shall provide for the complete cost towards power, fuel, tools, tackles, equipment, constructional plants, temporary works, labour, dismantling of all temporary piping, structures, valves, pumps, tanks & other misc equipment, strengthening of roads/ culverts/ bridges etc including arranging all clearances etc required for carrying out different activities & tests, materials, levies, taxes, transport, layout, repairs, rectification, maintenance till handing over, supervisions, colonies, shops, establishments, overheads, profits and all incidental items not specifically mentioned but reasonably implied and necessary to complete the work according to the tender document and this schedule.
05	The rates quoted shall be inclusive of cleaning of site of any vegetation, dressing and leveling etc including fixing of grid pillars, benchmarks etc required for commencement of site activities. No separate payment will be made towards the same.
06	Rates shall be quoted in figures and in words in clear legible writing. No overwriting is allowed. All scoring and cancellations should be countersigned and in case of illegibility the interpretation of engineer shall be final. All entries shall be in English.
07	The tender shall be deemed to have visited site and made himself aware of all the site conditions, studied the specifications and details of work to be done within the time schedule attached and to have acquainted himself of the conditions prevailing at site.
08	Engineer's decision shall be final and binding on the contractor regarding clarification of items in the schedule with respect to the other sections/volumes of the contract.
09	Unless otherwise specified and in case of item rate based price schedule and not on lumpsum basis, the quantities of the various items mentioned in this schedule of items are approximate, based on very preliminary information and may vary to any extent or to be deleted altogether. The quoted/ accepted rates shall remain firm and valid as long as variation in total value of work executed under this contract including extra items, but excluding any price escalation, remains within +/- 15% (Fifteen percent) of the contract price given in the LOI/WO.

**VOLUME-III A  
PRICE SCHEDULE, REV-01**

**Design, engineering, manufacturing, supply/ delivery, erection, commissioning, trial run, handing over to customer etc of Ventilation System for 2x600 MW unit at Singareni STPP, Adilabad,A.P.**

**TENDER NO PSER:SCT:SNG-M1429:13**

**SCH-1 - TOTAL PRICE**

SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	TOTAL QUOTED PRICE ( )
1.0	Total price for supply part & service part together for design, engineering, manufacturing, inspection and testing, painting, supply/ delivery duly packed at project site including freight, receipt, unloading, storage & handling at site, erection, commissioning, trial run, handing over to customer etc in line with drawings/ documents/ test procedures approved by BHEL/ customer, including supply of consumables, start-up & commissioning spares, special tools & tackles for maintenance, for the total scope defined in technical specification and terms & conditions of tender, taking into account all clarifications, confirmations and agreements till date for Ventilation System.	
<b>NOTE</b>		
1.0	Bidder to note that total price indicated above at 1.0 shall be considered for evaluation and hence should be complete in all respect for the full scope defined and considering all terms and conditions.	
2.0	While total price at sl no 1.0 as per above will be considered for evaluation, bidder shall furnish further break-up of price in the following schedules.	
3.1	SCH-2 - Main price break-up..	
3.2	SCH-3 - Supply price break-up.	
3.3	SCH-4 - Service price break-up.	
3.4	SCH-5 - Guaranteed power consumption (GPC).	
3.5	SCH-6 - MANDATORY SPARES	
3.0	Any item as per scope of work if not included in the price quoted above and shown separately will not be taken into cognizance and the offer shall be liable for rejection.	
4.0	Total price of 1.1 & 1.2 should match with 1.0.	
5.0	Total price of supply price break up should match with 1.1.	
6.0	Total price of service price break up should match with 1.2.	
7.0	Bidder shall note that ED,VAT,CST & Service Tax (On service part) shall be paid extra at actual as per tender provision. As such, bidder's price shall be exclusive of these components and evaluation of bidders total price will be done on this basis.	
8.0	There will be no technical loading for evaluation of bids on power consumption. However, in case power consumption is noted higher than estimated total power consumption figure specified in relevant portion schedule during the inspection/ PG test, penalty @ Rs 1.60 lac per additional KW shall be levied on vendor.	
9.0	If freight component is not specifically indicated, 2 % of total amount will be considered as freight component against each item for further processing.	
10.0	Estimated power consumption (EPC) figure for the system (for working drives only) has been considered as 1181 KW. So long bidder's quoted guaranteed power consumption (GPC) above remains within this EPC, there will be no technical loading of bid on power consumption for evaluation. However, if bidder's quoted GPC exceeds EPC, there shall be technical loading of bid for evaluation @ US\$ 2961 per KW of additional power over EPC. Bidder's guaranteed power consumption at motor input terminals (not shaft power) as furnished in relevant schedule shall be demonstrated by the successful bidder during performance testing at works/ site. In case power consumption is noted higher than EPC / bidder's quoted GPC whichever is higher, during inspection/ PG test, penalty @ US\$ 2961 per additional KW shall be levied on vendor.	
11.0	Price format shall not be changed by bidder in any case, since it may lead to cancellation of bidder's offer.	

**VOLUME-III A  
PRICE SCHEDULE, REV-01**

**Design, engineering, manufacturing, supply/ delivery, erection, commissioning, trial run, handing over to customer etc of Ventilation System for 2x600 MW unit at Singareni STPP, Adilabad,A.P.**

**TENDER NO PSER:SCT:SNG-M1429:13**

**SCH-2 - MAIN PRICE BREAK-UP**

SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	QUOTED PRICE ( )					TOTAL PRICE
		BASIC PRICE	ED (If any, as per tender)	CST (If any, as per tender)	VAT (If any, as per tender)	FREIGHT	
		(1)	(2)	(3)	(4)	(5)	
1.1	Total price for supply part for design, engineering, manufacturing, inspection and testing, painting, supply/ delivery duly packed at project site including freight, in line with drawings/ documents/ test procedures approved by BHEL/ customer, including supply of consumables, start-up & commissioning spares, special tools & tackles for maintenance, for the total scope defined in technical specification and terms & conditions of tender, taking into account all clarifications, confirmations and agreements till date for Ventilation System.						
1.2	Total price for service part for receipt, unloading, storage & handling at site, erection, commissioning, trial run, handing over to customer, operation & maintenance (O&M, optional), etc in line with drawings/ documents/ test procedures approved by BHEL/ customer, for the total scope defined in technical specification and terms & conditions of tender, taking into account all clarifications, confirmations and agreements till date for Ventilation System.			NA			
<b>TOTAL PRICE</b>							

**VOLUME-III  
PRICE SCHEDULE, REV-01**

**Design, engineering, manufacturing, supply/ delivery, erection, commissioning, trial run, handing over to customer etc of Ventilation System for 2x600 MW unit at Singareni STPP, Adilabad,A.P.**

**TENDER NO PSER:SCT:SNG-M1429:13**

**SCH-3 - SUPPLY PRICE BREAK-UP**

SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	QUANTITY	UNIT	QUOTED PRICE (₹)					
				BASIC PRICE (1)	ED (If any, as per tender) (2)	CST (If any, as per tender) (3)	VAT (If any, as per tender) (4)	FREIGHT (5)	TOTAL (6)=(1) ~ (5)
1.1.1	Sheet metal type air washer unit with centrifugal fan with motor, pumps with motors, dry panel filters (fabric type pre-filter), complete with fixing frame, air washer internals, inlet air louvers, piping as per IS:1239 pt I (heavy class galvanised), motorised valves for auto start of standby equipment, valves, nozzles, level switch, pressure switches, temp indicators, back wash arrangement, galvanised drain piping, etc as per spec. (fan capacity 2,50,000 CMH at 75 mmwc static pressure) as specified.The air washer and fan casing shall be spray galvanised on inside and outside.	8	NO						
1.1.2*	Unitary air filtration unit with centrifugal fan with motor, pumps with motors, dry panel filters (fabric type pre-filter), UAF internals, MS structures, piping as per IS:1239 pt I (heavy class galvanised), valves including motorised valves for auto start of standby equipment, nozzles, level switch, pressure switches, temp indicators, back wash arrangement, galvanised drain piping etc as per spec (fan capacity 75,000 CMH at 50 mmwc static pressure) as specified.The UAF and fan casing shall be spray galvanised on inside and outside.	2	NO						
1.1.3*	Supply air ducting (finished) for above area complete with dampers, grilles (with VCD & without VCD), supports (painted) and all accessories as specified.								
1.1.4*	Finished GSS (zinc coating 275 gms/ sqm) ducting with support structure etc.								
1.1.4.1*	18 G.	1500	SQM						
1.1.4.2*	20 G.	3000	SQM						
1.1.4.3*	22 G.	3000	SQM						
1.1.4.4*	24 G.	1500	SQM						
1.1.5*	MS duct (20 G) with epoxy paint for battery room.	100	SQM						
1.1.6*	MS grilles with VCD.	100	SQM						
1.1.7*	MS grilles without VCD.	10	SQM						
1.1.8*	MS air-intake louvers for aux bldgs.	40	SQM						
1.1.9*	Wall mounted dampers (gravity operated) for Aux. Bldgs. only.	20	SQM						
1.1.10*	Fire dampers (motor operated) with auto resetting, limit switch, indicating lamps etc as specified.	20	SQM						
1.1.11*	Motorized actuator with control panel with single phase power supply for the above fire damper.	30	NO						
1.1.12*	Thermal insulation 25 mm thk mineral wool & finish as specified for supply air duct.	800	SQM						
1.1.13*	GI volume control dampers for ducts	20	SQM						
1.1.14*	Roof extractor units (axial flow type) with hood, disconnect switch and all accessories as specified.								
1.1.15*	40,000 CMH at 15 mm WC.	34	NO						
1.1.16*	Axial flow supply fans with pre filter (wall mounted) complete with casing, TEFC sq cage induction motors & mounting frame, MS rain protection cowl, bird screen and all other accessories (suitable for 415V/3-phase supply).								
1.1.16.1*	10000 CMH at 30 mmWC.	24	NO						
1.1.16.2*	6000 CMH at 30 mmWC.	17	NO						
1.1.16.3*	4000 CMH at 30 mmWC.	4	NO						
1.1.17*	Axial flow exhaust fans (flame proof construction, Wall mounted) complete with casing, flame proof motors & mounting frame, MS rain protection cowl, bird screen and all other accessories epoxy painted (suitable for 415V/3-phase supply) as specified.								
1.1.17.1*	10,000 CMH at 15 mmWC.	20	NO						

**VOLUME-III  
PRICE SCHEDULE, REV-01**

**Design, engineering, manufacturing, supply/ delivery, erection, commissioning, trial run, handing over to customer etc of Ventilation System for 2x600 MW unit at Singareni STPP, Adilabad,A.P.**

**TENDER NO PSER:SCT:SNG-M1429:13**

**SCH-3 - SUPPLY PRICE BREAK-UP**

SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	QUANTITY	UNIT	QUOTED PRICE (₹)					TOTAL (6)=(1) ~ (5)
				BASIC PRICE (1)	ED (If any, as per tender) (2)	CST (If any, as per tender) (3)	VAT (If any, as per tender) (4)	FREIGHT (5)	
1.1.18*	Axial flow exhaust fans bifurcated type (flame proof construction, Wall mounted) complete with casing, flame proof motors & mounting frame, MS rain protection cowl, bird screen and all other accessories epoxy painted (suitable for 415V/3-phase supply) as specified.								
1.1.18.1*	7500 CMH at 15 mmWC.	6	NO						
1.1.19*	Axial flow exhaust fans (wall mounted) complete with casing, TEFC sq cage induction motors & mounting frame, MS rain protection cowl with bird screen, wire guard at inlet and all other accessories as specified (suitable for 415V/3-phase supply).								
1.1.19.1*	6300 CMH at 7 mmWC.	31	NO						
1.1.20*	Exhaust fan (propeller type) completes with induction motor & mounting frame MS rain protection cowl, bird screen and all other accessories as specified (suitable for 240V/ 1 phase).								
1.1.20.1*	1200 CMH at 5 mmWC.	89	NO						
1.1.21	Total lumpsum price for commissioning spares inclusive of packing forwarding, transportation up to site, etc. (Bidder shall submit item-wise price break-up).	1	LOT						
1.1.22	Total lumpsum price for special tools & tackles for maintenance inclusive of packing forwarding, transportation up to site, etc. (Bidder shall submit item-wise price break-up).	1	LOT						
1.1.23	Total lumpsum price for Mandatory Spare for ventilation system inclusive of packing forwarding, transportation up to site, etc. (Bidder to submit item-wise price break-up seperately).	1	LOT						
1.1.24	Instruments and accessories for complete hookup of ventilation system with main central control system.	1	LOT						
1.1.25	Any other item not indicated above, but required to complete Ventilation package as per system requirements.	1	LOT						
1.1.26	Total lumpsum price for Mandatory Spare for Ventilation System inclusive of	1	LOT						
<b>TOTAL PRICE</b>									

**NOTES:**

1	The bidder shall furnish unit rates for variable item (marked *) for necessary adjustment (plus or minus) variation during detailed engg. stage. The unit rates quoted above shall be considered and no separate unit rates shall be quoted. Unit rates shall be valid throughout the contract.
2	Bidder must submit prices in the Pro Forma duly filled in signed and stamped on every page without any ambiguity. The price shall be written against each item. Term such as "refer covering letter" etc. are not acceptable. Extra sheet may be attached if the space provided is not sufficient
3	Price format shall not be changed by the bidder as the bidder may get disqualified by doing so.
4	Any other item not indicated above, but required to complete supply of ventilation system as per system requirements.

**VOLUME-III  
PRICE SCHEDULE, REV-01**

**Design, engineering, manufacturing, supply/ delivery, erection, commissioning, trial run, handing over to customer etc of Ventilation System for 2x600 MW unit at Singareni STPP, Adilabad,A.P.**

**TENDER NO PSER:SCT:SNG-M1429:13**

**SCH-4 - SERVICES PRICE BREAK-UP**

SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	QUANTITY	UNIT	QUOTED PRICE	
				UNIT RATE	TOTAL PRICE
<b>Price break-up of 1.2 of SCH-2</b>					
1.1.1	Sheet metal type air washer unit with centrifugal fan with motor, pumps with motors, dry panel filters (fabric type pre-filter), complete with fixing frame, air washer internals, inlet air louvers, piping as per IS:1239 pt I (heavy class galvanised), motorised valves for auto start of standby equipment, valves, nozzles, level switch, pressure switches, temp indicators, back wash arrangement, galvanised drain piping, etc as per spec. (fan capacity 2,50,000 CMH at 75 mmwc static pressure) as specified.The air washer and fan casing shall be spray galvinised on inside and outside.	8	NO	(4)	(5)=(4)x(3)
1.1.2*	Unitary air filtration unit with centrifugal fan with motor, pumps with motors, dry panel filters (fabric type pre-filter), UAF internals, MS structures, piping as per IS:1239 pt I (heavy class galvanised), valves including motorised valves for auto start of standby equipment, nozzles, level switch, pressure switches, temp indicators, back wash arrangement, galvanised drain piping etc as per spec (fan capacity 75,000 CMH at 50 mmwc static pressure) as specified.The UAF and fan casing shall be spray galvinised on inside and outside.	2	NO		
1.1.3*	Supply air ducting (finished) for above area complete with dampers, grills (with VCD & without VCD), supports (painted) and all accessories as specified.				
1.1.4*	Finished GSS (zinc coating 275 gms/ sqm) ducting with support structure etc.				
1.1.4.1*	18 G.	1500	SQM		
1.1.4.2*	20 G.	3000	SQM		
1.1.4.3*	22 G.	3000	SQM		
1.1.4.4*	24 G.	1500	SQM		
1.1.5*	MS duct (20 G) with epoxy paint for battery room.	100	SQM		
1.1.6*	MS grilles with VCD.	100	SQM		
1.1.7*	MS grilles without VCD.	10	SQM		
1.1.8*	MS air-intake louvers for aux bldgs.	40	SQM		
1.1.9*	Wall mounted dampers (gravity operated) for Aux. Bldgs. only.	20	SQM		
1.1.10*	Fire dampers (motor operated) with auto resetting, limit switch, indicating lamps etc as specified.	20	SQM		
1.1.11*	Motorized actuator with control panel with single phase power supply for the above fire damper.	30	NO		
1.1.12*	Thermal insulation 25 mm thk mineral wool & finish as specified for supply air duct.	800	SQM		
1.1.13*	GI volume control dampers for ducts	20	SQM		
1.1.14*	Roof extractor units (axial flow type) with hood, disconnect switch and all accessories as specified.				
1.1.15*	40,000 CMH at 15 mm WC.	34	NO		
1.1.16*	Axial flow supply fans with pre filter (wall mounted) complete with casing, TEFC sq cage induction motors & mounting frame, MS rain protection cowl, bird screen and all other accessories (suitable for 415V/3-phase supply).				
1.1.16.1*	10000 CMH at 30 mmWC.	24	NO		
1.1.16.2*	6000 CMH at 30 mmWC.	17	NO		
1.1.16.3*	4000 CMH at 30 mmWC.	4	NO		

**VOLUME-III  
PRICE SCHEDULE, REV-01**

**Design, engineering, manufacturing, supply/ delivery, erection, commissioning, trial run, handing over to customer etc of Ventilation System for 2x600 MW unit at Singareni STPP, Adilabad,A.P.**

**TENDER NO PSER:SCT:SNG-M1429:13**

**SCH-4 - SERVICES PRICE BREAK-UP**

SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	QUANTITY	UNIT	QUOTED PRICE	
				UNIT RATE	TOTAL PRICE
<b>Price break-up of 1.2 of SCH-2</b>					
1.1.17*	Axial flow exhaust fans (flame proof construction, Wall mounted) complete with casing, flame proof motors & mounting frame, MS rain protection cowl, bird screen and all other accessories epoxy painted (suitable for 415V/3-phase supply) as specified.				
1.1.17.1*	10,000 CMH at 15 mmWC.	20	NO		
1.1.18*	Axial flow exhaust fans bifurcated type (flame proof construction, Wall mounted) complete with casing, flame proof motors & mounting frame, MS rain protection cowl, bird screen and all other accessories epoxy painted (suitable for 415V/3-phase supply) as specified.				
1.1.18.1*	7500 CMH at 15 mmWC.	6	NO		
1.1.19*	Axial flow exhaust fans (wall mounted) complete with casing, TEFC sq cage induction motors & mounting frame, MS rain protection cowl with bird screen, wire guard at inlet and all other accessories as specified (suitable for 415V/3-phase supply).				
1.1.19.1*	6300 CMH at 7 mmWC.	31	NO		
1.1.20*	Exhaust fan (propeller type) completes with induction motor & mounting frame MS rain protection cowl, bird screen and all other accessories as specified (suitable for 240V/ 1 phase).				
1.1.20.1*	1200 CMH at 5 mmWC.	89	NO		
1.1.21	Any other item not indicated above, but required to complete Ventilation package as per system requirements.	1	LOT		
<b>TOTAL PRICE</b>					

<b>NOTES:</b>	
1	The bidder shall furnish unit rates for variable item (marked *) for necessary adjustment (plus or minus) variation during detailed engg. stage. The unit rates quoted above shall be considered and no separate unit rates shall be quoted. Unit rates shall be valid throughout the contract.
2	Bidder must submit prices in the Pro Forma duly filled in signed and stamped on every page without any ambiguity. The price shall be written against each item. Term such as "refer covering letter" etc. are not acceptable. Extra sheet may be attached if the space provided is not sufficient
3	Price format shall not be changed by the bidder as the bidder may get disqualified by doing so.
4	Any other item not indicated above, but required to complete supply of ventilation system as per system requirements.

**VOLUME-III  
PRICE SCHEDULE, REV-01**

Design, engineering, manufacturing, supply/ delivery, erection, commissioning, trial run, handing over to customer etc of Ventilation System for 2x600 MW unit at Singareni STPP, Adilabad,A.P.

TENDER NO PSER:SCT:SNG-M1429:13

**SCH-5- GUARANTEED POWER CONSUMPTION**

SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	QUANTITY (WORKING)	POWER CONSUMPTION AS GUARANTEED (KW) AT MOTOR INPUT TERMINAL	TOTAL POWER CONSUMPTION AS GUARANTEED (KW)
		(3)	(4)	(5)=(3)x(4)
1	Centrifugal fans for air-washer units, 2,50,000 CMH at 75 mmwc	8		
2	Pumps for above air-washer	8		
3	Centrifugal fans for UAF units, 75,000 CMH at 50 mmwc	2		
4	Pumps for above UAF	2		
5	<b>RE Units.</b>			
5.1	40,000 CMH at 15 mmwc	27		
6	<b>Axial flow fan (supply fans) wall mounted</b>			
6.1	10,000 CMH at 30 mmwc	8		
6.2	6,000 CMH at 30 mmwc	14		
6.3	4,000 CMH at 30 mmwc	4		
7	<b>Axial flow fan (Exhaust fans flame proof construction and epoxy painted) wall mounted</b>			
7.1	10,000 CMH at 15 mmwc	5		
8	<b>Axial flow fan bifurcated type (Exhaust fans flame proof construction and epoxy painted) wall mounted 7,500 CMH at 15 mmwc</b>			
8.1	7,500 CMH at 15 mmwc	4		
9	<b>Axial flow fan (Exhaust fan) wall mounted</b>			
9.1	6,300 CMH at 7 mmwc	23		
<b>TOTAL CONSUMPTION (KW)</b>				

Notes: 1. Estimated power consumption figure for the Ventilation System (for working drives only) considered is 880 kW.

2. Bidder's guaranteed power consumption at motor input terminals (not shaft power) including power for control panel as furnished in guaranteed schedule shall be demonstrated by the successful bidder during performance testing at works/site.

3. There shall be no technical loading for evaluation of bids. However, in case the power consumption is noted higher than estimated power consumption figure (kW) during the inspection /PG test, the penalty @ US\$ 3374/- per additional KW shall be levied on the supplier.

**VOLUME-III  
PRICE SCHEDULE, REV-01**

Design, engineering, manufacturing, supply/ delivery, erection, commissioning, trial run, handing over to customer etc of Ventilation System for 2x600 MW unit at Singareni STPP, Adilabad,A.P.

TENDER NO PSER:SCT:SNG-M1429:13

**SCH-6 - MANDATORY SPARES**

SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	QUANTITY	TOTAL PRICE (₹)					
			BASIC PRICE	ED (If any, as per tender)	CST (If any, as per tender)	VAT (If any, as per tender)	FREIGHT	TOTAL PRICE
			(1)	(2)	(3)	(4)	(5)	(6)=(1) ~ (5)
<b>1</b>	<b><u>MECHANICAL AND GENERAL</u></b>							
1.1	<b>Pumps (for each model)</b>							
1.1.1	Pump bearing	1 set						
1.1.2	Pump motor bearings	1 set						
1.1.3	Shaft sleeve	2 sets						
<b>2</b>	<b><u>CONTROL AND INSTRUMENTATION</u></b>							
2.1	Electronics transmitters							
2.1.1	Transmitters of all types and model no.( for the measurement of pressure,differential pressure,flow,level temp etc.)	5% or 1 no of each type and model whichever is more (to be devided into various ranges in proportion to main population						
<b>2.2</b>	<b>Temp. elements</b>							
2.2.1	RTD's	5% or 1 no whichever is more **						
2.2.2	Thermo well	5% or 1 no whichever is more **						
	*with head assembly terminal block and nipple	**to be devided into verious insertion lengths in proportion to main population						
2.3	All type of local indicators	5% or 1 no of each make model and type whichever is more (to be devided to various ranges in proportion to main of all make model type population )						
2.4	Process actuated switch devices include all types of pressure differential pressure, flow temp. and differential temp. level switch devices.	5 % or 1 no of each type and model whichever is more						
2.5.1	Relative humidity sensors	2 nos						
2.5.2	Geysterstats	2 nos						
2.5.3	Local humidity/temperature indicators	2 nos each						
<b>3</b>	<b><u>PROCESS CONNECTION PIPING (FOR IMPULSE PIPING/TUBING SAMPLING PIPING/TUBING AND AIR SUPPLY PIPING AS APPLICABLE)</u></b>							
3.1	Valves	10 % or 1 no of each type class size and model whichever is more						
3.2	2 way/3 way manifolds	10 % or 1 no of						
3.3	Fittings	10 % or 1 no of						
<b>4</b>	<b><u>ELECTRICAL ACTUATOR</u></b>							
4.1	Actuator	10 % or 1 no of type model and rating whichever is more						
<b>TOTAL</b>								

**NOTES**

1	The bidder shall furnish unit rates for variable item (marked *) for necessary adjustment (plus or minus) variation during detailed engg. stage. The unit rates quoted above shall be considered and no separate unit rates shall be quoted. Unit rates shall be valid throughout the contract.
2	Bidder must submit prices in the Pro Forma duly filled in signed and stamped on every page without any ambiguity. The price shall be written against each item. Term such as "refer covering letter" etc. are not acceptable. Extra sheet may be attached if the space provided is not sufficient
3	Price format shall not be changed by the bidder as the bidder may get disqualified by doing so
4	Any other item not indicated above, but required to complete supply of ventilation system as per system requirements.

**VOLUME-IIIA**  
**PRICE SCHEDULE, REV-01**

Design, engineering, manufacturing, supply/ delivery, erection, commissioning, trial run, handing over to customer etc of Ventilation System for 2x600 MW unit at Singareni STPP, Adilabad,A.P.

TENDER NO PSER:SCT:SNG-M1429:13

**SCH-7 - OPERATION & MAINTENANCE (OPTIONAL PRICE)**

SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	QUANTITY	ALL INCLUSIVE RATE/ PRICE (Rs)
(1)	(2)	(3)	(4)
1.0	Total lump sum prices for recommended spares for 3 (three) years normal operation of ventilation system inclusive of packing forwarding, transportation up to site. (Bidder to furnish lists of spares with item wise prices separately).	1	LOT
2.0	Operation & maintenance of plant per month basis.		
2.1	Man power.	1	LOT
2.2	Spares.	1	LOT
2.3	Consumable.	1	LOT
2.4	Supervision of operation & maintenance only monthly basis.	1	LOT