

**Government
eProcurement
System**

eProcurement System Government of India

Tender Details

Date : 20-Mar-2023 12:46 PM

Print

Basic Details

Organisation Chain	National Aluminium Company Limited,NALCO NALCO-Corporate Office-Bhubaneswar Materials,CO,Bhubaneswar,NALCO		
Tender Reference Number	NBC/MM/VFDTX/2023		
Tender ID	2023_NALCO_745886_1		
Tender Type	Limited	Form of contract	Supply
Tender Category	Goods	No. of Covers	2
General Technical Evaluation Allowed	No	ItemWise Technical Evaluation Allowed	No
Payment Mode	Not Applicable	Is Multi Currency Allowed For BOQ	No
Is Multi Currency Allowed For Fee	No	Allow Two Stage Bidding	No

Cover Details, No. Of Covers - 2

Cover No	Cover	Document Type	Description
1	Fee/PreQual/Technical	.pdf	Technical Document
		.rar	Commercial Documents
2	Finance	.xls	BOQ

Tender Fee Details, [Total Fee in ₹ * - 0.00]

Tender Fee in ₹	0.00		
Fee Payable To	Nil	Fee Payable At	Nil
Tender Fee Exemption Allowed	No		

EMD Fee Details

EMD Amount in ₹	0.00	EMD through BG/ST or EMD Exemption Allowed	No
EMD Fee Type	fixed	EMD Percentage	NA
EMD Payable To	Nil	EMD Payable At	Nil

[Click to view modification history](#)

Work /Item(s)

Title	DRY TYPE TRANSFORMER				
Work Description	DRY TYPE TRANSFORMER				
Pre Qualification Details	Please refer Tender documents.				
Independent External Monitor/Remarks	AS PER TENDER DOCUMENTS				
Show Tender Value in Public Domain	No				
Tender Value in ₹	0.00	Product Category	Miscellaneous Goods	Sub category	NA
Contract Type	Tender	Bid Validity(Days)	120	Period Of Work(Days)	180
Location	DAMANJODI	Pincode	763008	Pre Bid Meeting Place	NA
Pre Bid Meeting Address	NA	Pre Bid Meeting Date	NA	Bid Opening Place	BHUBANESWAR
Should Allow NDA Tender	No	Allow Preferential Bidder	No		

Critical Dates

Publish Date	20-Mar-2023 03:00 PM	Bid Opening Date	13-Apr-2023 04:00 PM
Document Download / Sale Start Date	20-Mar-2023 03:10 PM	Document Download / Sale End Date	10-Apr-2023 03:00 PM
Clarification Start Date	NA	Clarification End Date	NA
Bid Submission Start Date	20-Mar-2023 03:30 PM	Bid Submission End Date	10-Apr-2023 03:00 PM

Tender Documents

NIT Document	S.No	Document Name	Description	Document Size (in KB)	
	1	Tendernotice_1.pdf	Instruction to bidder	1419.75	
Work Item Documents	S.No	Document Type	Document Name	Description	Document Size (in KB)
	1	BOQ	BOQ_784266.xls	BOQ	323.00
	2	Tender Documents	TechnicalSpecification.pdf	TECHNICAL DOCUMENT	988.55
	3	Tender Documents	commercial.rar	COMMERCIAL DOCUMENT	3020.04

Limited Bidders List

S.No.	Bidder Name	Bidder Login Id
1.	Bharat Bijlee Ltd	ashwinikumar.sathe@bharatbijlee.com
2.	CG POWER AND INDUSTRIAL SOLUTIONS LTD	taposh.pal@cgglobal.com
3.	Indo Tech Transformers Limited	info@indo-tech.com
4.	Kanohar Electricals Limited	jagbir.singh@kanohar.com
5.	KIRLOSKAR LECTRIC COMPANY LIMITED	rajib.ganguli@kirloskarelectric.com
6.	Schneider Electric Infrastructure Ltd.	sachin.chauhan@se.com
7.	Transformer and Rectifiers india Limited	info@transformerindia.com
8.	Vijai Electricals Limited	mohit.chauhan@vijai.co.in
9.	VOLTAMP TRANSFORMERS LIMITED	dt_offer@voltamptransformers.com

Auto Extension Corrigendum Properties for Tender

Iteration	No. of bids required for bid opening a tender	Tender gets extended to No. of days
1.	1	7

Bid Openers List

S.No	Bid Opener Login Id	Bid Opener Name	Certificate Name
1.	madhumita.sahoo@nalcoindia.co.in	Madhumita Sahoo	MADHUMITA SAHOO
2.	purna.gummadi@nalcoindia.co.in	P Chandrasekhar Gummadi	Purna Chandrasekhar Gummadi
3.	ajaya.sahu@nalcoindia.co.in	Ajaya Kumar Sahu	AJAYA KUMAR SAHU
4.	sudesh.pattnaik@nalcoindia.co.in	SUDESH PATTNAIK	SUDESH KUMAR PATNAIK

GeMARPTS Details

GeMARPTS ID	F5XEZLS357S9
Description	DRY TYPE TRANSFORMER FOR VFD
Report Initiated On	20-Mar-2023
Valid Until	19-Apr-2023

Tender Properties

Auto Tendering Process allowed	No	Show Technical bid status	Yes
Show Finance bid status	Yes	Show Bids Details	Yes
BoQ Comparative Chart model	Normal	BoQ Compative chart decimal places	2
BoQ Comparative Chart Rank Type	L	Form Based BoQ	No

Tender Inviting Authority

Name	Madhumita Sahoo
Address	Nalco Corporate Office, Bhubaneswar

Tender Creator Details

Created By	Madhumita Sahoo
Designation	Manager
Created Date	20-Mar-2023 12:19 PM

Technical Specification of “Dry type Transformer”

Technical Specification of “Dry type Transformer”

INDEX SHEET

The document Cover Sheet indicates revisions made in this document along with the purpose of issue of the revised document. The details of revisions made in the enclosures of this document are listed in the table of *Contents* below and the enclosures listed therein are an integral part of this document.

Contents

Part	Size	Description	No. of Pages	Rev. No.	Pages Revised
	A4	Index Sheet and Status of Revision	2	00	
	A4	Site conditions	1	00	
Part-I	A4	General Specifications	5	00	
Part-II	A4	Design Data Sheet	4	00	
Part-IIIA	A4	Notes on Method of Offer Submission	1	00	
Part-IIIB	A4	Scope of Supply and Schedule of Prices	1	00	
Part-IV	A4	Inspection and Test Plan	1	00	
Part-V	A4	Compliance Declaration	2	00	
Annexure I	A4	Life Cycle Perspective	1	00	

Plant 1.0 MTPA ALUMINA REFINERY STREAM-5	SITE CONDITIONS					<div> <div> <div>नालको</div> <div>NALCO</div> </div> <div> <div>नेशनल एल्युमिनियम कम्पनी लिमिटेड</div> <div>National Aluminium Company Ltd.</div> </div> </div> <div> <div>Rev</div> <div>00</div> <div>Page</div> <div>1</div> <div>of</div> <div>1</div> </div>				
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Sr. No.	Description	Site Condition
1.	Location	Damanjodi, Odisha
2.	Altitude	780 to 830 meters above MSL
3.	Ambient Temperature - Maximum	47 Deg C
4.	Ambient Temperature - Minimum	3 Deg C
5.	Design Ambient Temperature (For Electrical Equipment)	50 Deg C
6.	Max. Relative Air Humidity	88.8 % at 3 Deg C
7.	Rainfall (Max.)	80 mm per hour
8.	Seismic Zone	II As per IS 1893(Part I) : 2016
9.	Soil Resistivity	Later Ohm-meter
10.	Thermal Resistivity of soil	-- Deg. K.m/watt
11.	Presence of Corrosive atmosphere	Yes. Highly polluted alkaline containing NaOH vapour and alumina / bauxite dust laden
12.	Tropicalizing required	Yes

Plant 1.0 MTPA ALUMINA REFINERY STREAM-5	DRY TYPE TRANSFORMER Part-I - General Specifications	नालको  NALCO नेशनल एल्युमिनियम कम्पनी लिमिटेड National Aluminium Company Ltd.					
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1.0 INTRODUCTION

This specification covers general requirements for design, manufacturing, inspection & testing at manufacturer's works and supply of **Dry type distribution transformers for Individual VFD (system voltage up to & including 33 kV)** for indoor installations.

Equipment to be supplied shall comply with latest revision of applicable Indian Standards (IS), IEC Standards and specific codes & standards mentioned in clause '*Codes and standards*' of Part-II of this specification. Equipment shall be complete with all necessary components and accessories required for efficient and trouble free operation.

Scope of supply and services covered under this specification shall be as per various parts of this specification. Standard and descriptive requirement is covered in Part-I while specific requirement is covered in Part-II. Offer shall be submitted as per Part-III A, '*Notes on Method of Offer Submission*'. Requirements for testing at manufacturer's works are covered in Part-IV.

Wherever conflict arises between the various clauses of this specification or with the standards, it shall be clearly brought out to notice of Purchaser/ Consultant. Final decision shall be subject to Purchaser/ Consultant approval.

2.0 GENERAL REQUIREMENTS

2.1 Construction

- 2.1.1 The transformer shall be totally enclosed dry type for indoor installations with Natural air (AN) type of cooling.
- 2.1.2 The transformer shall be Vacuum Pressure Impregnated (VPI) type as specified in Part-II.
- 2.1.3 For VPI type transformers, windings shall be impregnated with epoxy resin by vacuum pressure impregnation process to ensure void free impregnation.

2.2 Enclosure

- 2.2.1 Transformer shall be housed in free standing enclosure with welded sheet steel frames of thickness not less than 3.0 mm and 2.0 mm for doors/ covers.
- 2.2.2 Minimum degree of enclosure protection shall be IP 33 for indoor installations unless specified otherwise in Part-II.
- 2.2.3 Enclosure shall have louvers backed up with wire mesh for ventilation purpose.
- 2.2.4 Enclosure shall have opening of sufficient size and number with gasket cover for easy access to leads, inside terminals of bushings and taps for maintenance and visual inspection.
- 2.2.5 Enclosure shall be provided with safety limit switches which shall operate in case any of the sides of enclosure is opened in transformer energized condition. The safety switch contacts shall be wired up to marshalling box for further use by the Purchaser.
- 2.2.6 Transformer and enclosure shall be suitably reinforced to prevent distortion during handling.
- 2.2.7 Base channel shall be provided with skid and pulling eyes to facilitate handling.
- 2.2.8 Enclosure shall be provided with suitable lifting lugs and necessary hardware for ease of installation.
- 2.2.9 Different parts of transformer shall be connected by copper flexibles for earthing continuity purpose.
- 2.2.10 4 nos. bidirectional rollers as suitable shall be provided with the enclosure for fixing the transformer on foundation.
- 2.2.11 Fans if provided shall be supported on brackets attached to the enclosure and shall be fitted with fan guards.

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2.3 Core and windings

- 2.3.1 The Transformer shall be double wound core type with cold rolled grain oriented (CRGO) silicon steel laminations perfectly insulated and clamped to minimize vibrations and noise. Core shall be protected against corrosion by resin coat. Core fastening bolts shall be insulated to reduce losses and to avoid hotspots. All parts of the magnetic circuit shall be effectively connected to earth system.
- 2.3.2 The core and winding shall be suitably braced to prevent displacement or distortion during transportation or abnormal electrical conditions in service.
- 2.3.3 The core shall be provided with lugs, suitable for lifting the complete core and coil assembly.
- 2.3.4 All steel sections used for supporting the core shall be thoroughly sand blasted after cutting, drilling and welding and shall be hot dip galvanized.
- 2.3.5 The winding conductor shall be of electrolytic grade copper, free from scales and burrs.
- 2.3.6 The insulation class for winding shall be as specified in Part-II. The insulation shall have high tensile and dielectric strength. Adequate measures shall be taken during casting to avoid the void formation, cracking etc. of the cast coils.
- 2.3.7 The transformer shall have vacuum pressure impregnated windings. Encapsulated windings shall be maintenance free, humidity resistant, tropicalised, fire resistant, self-extinguishing and when exposed to arcing no toxic gases shall be generated.
- 2.3.8 Both HV and LV windings of each phase shall be separately cast on rigid tubular coil co-axially arranged under vacuum into moulds. The resin used for winding insulation shall be non-hygroscopic to prevent the penetration of moisture into windings. The resin shall be non-inflammable, self-extinguishing, void free and suitable for tropical climate.
- 2.3.9 If specified in Part-II, RTDs for winding temperature measurement shall be embedded in each phase winding (at hot spot location). No. of RTDs shall be as per Part-II. RTDs shall be connected to Temperature Scanner/ Indicator in marshalling box and Winding temperature high alarm and trip contacts shall be wired up to marshalling box terminal block for further use by Purchaser.

2.4 Busbars and Internal Connections

- 2.4.1 All busbars including circuit connections shall be manufactured from hard drawn, high conductivity copper.
- 2.4.2 Each phase busbar and joint shall be fully insulated to restrict the initiation and propagation of arcs i.e. each phase busbar shall be sleeved/ covered in insulating material or separated by barriers of insulating material or phase segregated within metal chambers. Joints shall be covered with removable insulating shrouds.
- 2.4.3 The complete busbar and connection system shall be full fault rated and braced for the fault currents as specified in Part-II. All joints shall be secured against loosening.
- 2.4.4 Busbar support insulators shall be designed and tested to comply with the applicable standards.
- 2.4.5 Air clearance and creepage distances shall be maintained as per the relevant standard, without the sleeves/ shrouds.

2.5 Tap Changer

- 2.5.1 Taps shall be provided on the HV winding. Number of taps shall be as per Part-II.
- 2.5.2 Off-circuit tap changer shall be in the form of links or tap switch as per manufacturer's standard. Tap position shall be visible from outside the transformer enclosure.
- 2.5.3 The transformer shall be capable of delivering its rated output at any tap position without damage.

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2.6 *Terminal Box*

- 2.6.1 Windings shall be brought out and terminated in cable boxes. LV termination shall be suitable for cable as specified in Part-II.
- 2.6.2 Cable boxes (both HV & LV) shall be supplied with removable type undrilled gland plate and with bottom entry. For single core cables, gland plate shall be of non-magnetic material. Cable boxes shall be designed to adapt the type and no. of cables as specified in Part-II.
- 2.6.3 The bus bars in terminal box shall be supported by the supporting insulators from the top frame of the enclosure.
- 2.6.4 Primary cable box for distribution transformers shall be able to withstand specified primary fault level for 0.25 second unless otherwise agreed.
- 2.6.5 Separate neutral terminal box shall be provided on side of LV cable box. A separate neutral bushing, with dimensions same as phase bushing, shall be provided for neutral earthing of transformer.
- 2.6.6 Neutral shall be solidly earthed by Galvanized steel strip or cable as specified in Part-II. Suitable pin type epoxy insulators/ saddles and clamps shall be provided between neutral bushing and bottom of enclosure for supporting earthing strip/ cable respectively.
- 2.6.7 Vendor shall provide current transformers on neutral bus for REF protection and stand-by earthfault protection if specified in Part-II. CT for REF protection shall be installed before neutral bifurcation.
- 2.6.8 Space between power terminals and gland plate shall be as per Part-II.

2.7 *Marshalling box (including fan control)*

- 2.7.1 CRCA sheet steel enclosed weatherproof marshalling box shall be provided to house all auxiliary devices except those mounted on transformer. Bottom of the marshalling box shall be at least 600 mm above floor level and provided with removable bolted and undrilled gland plates for Purchaser's external cables.
- 2.7.2 Marshalling box shall have hinged front door fitted with glass and handle with padlocking arrangement so that WTI readings can be taken without opening the door. All doors, covers and plates shall be provided with neoprene gaskets.
- 2.7.3 Marshalling box shall be either flush mounted or mounted on the enclosure at accessible height so that it can be accessed without opening the enclosure.
- 2.7.4 Thermostat controlled space heater and cubicle illumination lamp with MCB shall be provided in the marshalling box.
- 2.7.5 All contacts for alarm, trip and indication circuits shall be potential free and brought out to separate terminals at the terminal blocks in the marshalling box. Limit switches shall be wired upto marshalling box terminal block for further use by the Purchaser.
- 2.7.6 Separate MCBs shall be provided for protection, isolation and distribution of AC & DC control supplies in the marshalling box.
- 2.7.7 CT terminals shall be provided with standard shorting facility. The wires shall be drawn through cable troughs with covers inside marshalling box. Cables from auxiliary devices mounted on transformer shall be routed through neatly clamped conduits up to marshalling box. Engraved identification ferrules, marked as per approved wiring diagrams shall be provided on each wire.
- 2.7.8 Not more than two wires shall be connected to one terminal of the terminal block in marshalling box. 20% spare terminals shall be provided for Purchaser's future use.
- 2.7.9 Winding Temperature Scanner/ Indicator shall be located in the marshalling box. Spare channels shall be provided for Temperature scanner.
- 2.7.10 Cooling fan power control shall be provided in the marshalling box. External power supply to the fan motors shall be by Purchaser. Main isolating switch with separate protection (Overcurrent+thermal overload) with Type-2 co-ordination, and control circuit

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for each fan motor shall be provided by the vendor. Local & remote (auto) control provision shall be included for the motors. Motor ON/ OFF indications shall be provided in the marshalling box.

2.8 Control Wiring

Wiring from all auxiliary devices on transformer to marshalling box shall be carried out with 1100 volt grade PVC insulated armoured cables and all these inter-connecting cables shall be supplied by transformer manufacturer along with cable glands and lugs. Control wiring shall be carried out with flexible heat resistant switchboard wires of minimum size 1.5 sq. mm for control circuits and 2.5 sq. mm for CT circuits. Wires connected to earth shall be of *green* colour only.

2.9 Accessories

Transformer shall be complete with following accessories:

- Primary, secondary and neutral bushings
- Lifting eye bolts for transformer enclosure & core-coil assembly
- Earth terminals
- Temperature scanner/ Indicator
- Anti-earth quake clamps
- Four bi-directional flat rollers with locking and bolting device
- Marshalling box with fan control
- Off circuit tap changer
- Safety limit switches on the enclosure
- Cooling fan unit
- Jacking pad for core-coil assembly
- Nameplate, Rating plate, terminal marking plate and danger plate
- Caution plate “ENTRY PROHIBITED WHEN TRANSFORMER IS ENERGISED”

2.10 Nameplate

- 2.10.1 The nameplate shall be clearly and indelibly marked with the data specified in the appropriate IS/ IEC standards.
- 2.10.2 Nameplate shall be made of 2 mm thick stainless steel or weather-proof material.

2.11 Painting

Painting procedure and final paint shade shall be as indicated in Part-II.

2.12 Earthing terminals

Two earthing terminals suitable to connect earthing conductor of size as mentioned in Part-II shall be provided at diagonally opposite positions of bottom corner of the enclosure. These grounding terminals shall be suitable for bolted connections.

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3.0 INSPECTION AND DESPATCH

Inspection & testing shall be carried out based on latest revision of this specification and approved vendor drawings certified for construction. In case of any ambiguity between vendor drawings and order specifications, the requirements indicated in order specification shall govern.

Purchaser/ Purchaser's representative shall have right to carry out stage inspection and shop visit to review the manufacturing progress. However, manufacturer need not hold any of the manufacturing activity for stage inspection by Purchaser/ Purchaser's representative.

All routine and type tests as specified in Part-IV shall be carried out during final inspection at manufacturer's works in the presence of Purchaser/ Purchaser's representative. Minimum 15 days advance notice shall be given for carrying out final inspection and testing.

Vendor shall ensure that all instruments associated with testing of the equipment are calibrated by a competent testing authority and the calibration certificates are valid at the time of carrying out the testing of equipment.

After successful completion of inspection and testing, vendor shall furnish all as-built documents in required number of sets. The release order for dispatch of material will be issued only after receipt of final documents by the Purchaser,.

4.0 GUARANTEE

The performance figures (except loss figures and percentage impedance values) which will be indicated by vendor in Part-II are guaranteed subject to the tolerance permitted by standards.

If actual losses, as per test reports work out to be more than the maximum guaranteed loss, then reduction in price shall be applicable based on the same rates indicated in Part-II of this specification for capitalization of losses.


If any equipment supplied by vendor fails at site during erection, testing, commissioning or service (within guarantee period), the vendor shall repair and put back into successful operation the failed equipment within the time frame and procedure of repair agreed with the Purchaser depending on nature of failure, at no extra cost to Purchaser.

Purchaser reserves the right to reject the equipment in case of failure to meet the guarantee in respect of following performance:


- i. Losses exceeding 20% over the guaranteed value. (For losses exceeding 10% but $\leq 20\%$, penalty shall be levied based on rates of capitalization of losses indicated in Part-II of this specification).
- ii. Impedance difference more than 10% over the guaranteed value.
- iii. Temperature rise exceeds by more than 5°C over the guaranteed value.
- iv. Transformer fails in power frequency voltage withstand test.

However, the vendor will be given an opportunity to rectify his equipment at his own cost. Also Purchaser reserves the right to use rejected equipment till it is rectified.

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		PART - II												
		DESIGN DATA SHEET			Rev.			00		Page		1 OF 4		
GENERAL	001	Tag No.	:	38PU-5220A-VFD-TR, 38PU-5220B-VFD-TR, 38PU-5220C-VFD-TR										
	002	Make	:	*										
	003	Rating and Quantity	:	750 kVA / 3 Nos.										
	004	Location	:	Indoor										
	005	Type	:	Vacuum Pressure Impregnated (non-encapsulated)										
	006	Service	:	For Individual VFD with 510kW motor										
	007	VFD Make/ Model	:	ABB / ACS880-104-0800A-7										
SPECIFIC CODES	008	IS 2026 : Power Transformers												
	009	IS 11171 : Specification for Dry type Power transformers												
	010	IS 10028 : Code of practice for selection, installation and maintenance of transformers												
	011	IEC 60076 -11 : Dry-type Transformers												
	012	IEC/TR 60616 : Terminal and Tapping Markings for Transformers												
	013	IEC 60529 : Degrees of Protection provided by enclosures (IP Code)												
	014	IEC 60364 : Electrical installations of buildings												
	015	IEC 60137 : Insulated bushings for AC voltages above 1000V												
	016	IEC 60076 -10/ NEMA TR-1 : Determination of sound levels												
	017	Indian Electricity Act & CEA Regulations												
	018	CBIP manual on Transformer												
BASIC DATA	019													
	020													
	021	Type of cooling	:	AN / AE		(for Indoor installation)								
			:	ANAN / ANAF		(for Outdoor installation)								
	022	Vector Group	:	Dyn11										
	023	System grounding												
		a) Primary side	:	Resistance Grounded										
		b) Secondary side	:	Solid Grounded										
	024	Primary rated voltage & variation	:	6.6 kV ± 10 %										
	025	Secondary no-load voltage	:	0.72 kV										
	026	Primary rated current	:	A		*								
	027	Secondary rated current	:	A		*								
	028	Frequency & variation	:	50 Hz + 3 % / -5 %										
	029													
	030	Temp. Class of Insulation	:	Class F with temp. rise limited to class B										
	031	Temp. rise of 70 degC for an ambient temp of 50 degC. (max. temp 120 degC)												
	032	Maximum sound level	:	75 dB (A)										
		(As per IEC 60076 -10/ NEMA TR-1)												
	033	Fault withstand at Primary side	:	40	kA for 0.25 s									
	034	Fault withstand at Secondary side	:	kA for 2.0 s		*								
035	Inrush current & duration during switching on	:	6-8 times Full load current											
036	Insulation strength for Rated Voltage -			0.69		6.6								
	a) Highest System Voltage			1.1		7.2								
	b) One min. power frequency withstand voltage in kV (rms)			3		20								
	c) Impulse withstand voltage in kV (Peak)			-		60								
037	Suitable for Parallel operation	:	No											
PERFORMANCE DATA	038	No-load current at 50 Hz												
		At 90/ 100/ 110% rated voltage	:	/		/		A				*		
	039													
	040	Impedance at rated current and frequency at 75°C												
		a) Principal tap/ Lowest tap/ Highest Tap	:	/		/		%				*		
		b) Zero sequence impedance	:	%									*	
	041													
	042	Reactance at rated current & frequency at 75°C on Principal tap	:								ohms		*	
	043	Resistance at rated current & frequency at 75°C on Principal tap	:								ohms		*	
	044	Efficiency at 75°C and at unity power factor												
		a) 100/ 75/ 50% Load	:	/		/		%				*		
	b) Load at which maximum efficiency is desired :		80		% F.L.									
	c) Load at which maximum efficiency occurs :		% F.L.								*			

 नालको NALCO नेपाल एलुमिनियम कम्पनी लिमिटेड National Aluminium Company Ltd.		DRY TYPE TRANSFORMER PART - II DESIGN DATA SHEET					
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PERFORMANCE DATA	045	Regulation at full load at 75°C					
		a) Unity PF / 0.8 PF Lag	:	/	%	*	
	046						
	047	Losses					
		a) Iron loss at rated voltage and frequency and at principal tap	:		kW	*	
		b) Copper loss at rated current and temp. of 75°C and at principal tap	:		kW	*	
		c) Total auxiliary losses (cooling fan motor etc.)	:		kW	*	
	048	Offer will be evaluated based on capitalisation loss figures : Yes / No					
	049	Capitalisation of Iron losses	:	Rs. 91350 per kW			
050	Capitalisation of Copper losses	:	Rs. 19000 per kW				
051	Capitalisation of Total auxiliary losses	:	Not Applicable				
CORE AND WINDING	052	Type of construction	:	Core type			
	053	Core material	:	Low loss CRGO Grade			
	054	Maximum flux density at 100% rated voltage	:	Tesla		*	
	055	Insulating material					
		a) Inter turn insulation Primary	:	*			
		b) Inter turn insulation secondary	:	*			
		c) Core to secondary insulation	:	*			
		d) Primary to secondary insulation	:	*			
	056	Winding conductor material	:	Electrolytic grade copper			
	057	Maximum current density					
		Primary / Secondary	:	/	A/ sq.mm	*	
	058	Conductor area					
	Primary / Secondary	:	/	sq.mm	*		
	Magnetic circuit core bolt withstand voltage for 1 minute	:	2 kV				
ENCLOSURE	060	Material	:	CRCA sheet steel			
	058	Thickness of sheet steel					
		Sides / Cover / Bottom / doors	:	___mm/___mm/___mm/___mm			
	059	Degree of protection (min.)	:	IP33 (indoor)			
	060	Final Paint shade	:	RAL 7032			
	061	Paint type and process	:	Epoxy based, Powder coating			
	062	Paint thickness	:	60 microns			
	063	Name plate thickness	:	Min. 2 mm			
	064	Name plate material	:	Stainless steel / Metal photo			
TAP CHANGER	066	Type	:	OCTC on HV winding			
	067	Tap changing mechanism	:	Tap switch / Tap changing links			
	068	Range of tap/ No. of steps from principal tap	:	+/- 5% in steps of 2.5%			
	069	Visual tap position indicator required	:	Yes			
	070	Padlocking facility (for OCTC) for tap in each position required	:	Yes			
	071						
MARSHALLING BOX	072	Enclosure	:	Weather proof, IP55			
	073	Material of Construction	:	CRCA sheet steel			
	074	Minimum thickness of sheet steel	:	2 mm			
	075	Gasket material	:	Neoprene Rubber			
	076	Minimum copper wire size					
		a) For control circuit	:	1.5 sq. mm			
		b) For CT circuit	:	2.5 sq. mm			
	077	Cooling fan control provided in marshalling box	:	Yes / No			
	078	Auto / Manual START-STOP of Motors	:	Yes / No			
	079	Auxiliary Voltage					
		415 V ± % 50 Hz ± % **	:	Three phase motor supply (for cooling fan)			
		230 V ± % 50 Hz ± % **	:	Control & monitoring / Auxiliary supply for			
			:	space heater, marshalling cabinet illumination			
		220 V / 110 V-DC **	:	Control & monitoring			

 नालको नेपाल एलुमिनियम कम्पनी लिमिटेड National Aluminium Company Ltd.		DRY TYPE TRANSFORMER PART - II DESIGN DATA SHEET					
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DIMENSIONS/ WEIGHT	116	Approximate overall dimensions (LxBxH)					
		Length / Width / Height : / / mm *					
	117	Approximate total weight					
		a) Core and coil : kg *					
		b) Enclosure : kg *					
		c) Total weight : kg *					
	118	Shipping data					
		a) Weight of heaviest package : kg *					
	b) Dimensions of largest package (LxWxH in mm) : x x mm *						
COOLING (AF & ANAF)	120	Number of fans- : Nos- *					
	121	Total power consumption of cooling system- : kW *					
	122	Fan- :					
		a) Type- : *					
	124	Fan Motor- :					
		a) Rating- : kW *					
		b) Type- : 3-Ph Squirrel-Cage IM-IP55 enclosure *					
	125						
DOCUMENTS & DRAWINGS		Description		Prints with offer	Prints for approval	Prints with final doc	
	126	Dimensional dwg. showing GA, foundation plan etc.		Yes	Yes	Yes	
	127	Rating plate drawing		-	Yes	Yes	
	128	Power & control schematic of marshalling box		-	Yes	Yes	
	129	Dwg. of major components as bushings, auxiliary devices etc.		-	Yes	Yes	
	130	Rating plate drawing		-	Yes	Yes	
	131	Terminal arrangement drawing		-	Yes	Yes	
	132	Complete BOM indicating make, type, Sr. No. etc.		-	Yes	Yes	
	133	O&M manuals for transformers and all auxiliary equipment		-	Yes	Yes	
	134	Manufacturing schedule		-	Yes	Yes	
	135	Routine test certificates		-	Yes	Yes	
	136	Type test certificates		-	Yes	Yes	
	137	SC test reports of identical trafo.		-	Yes	Yes	
	138	Quality Assurance Plan & Inspection Test Procedure		-	Yes	Yes	
139							
	140	Notes:					
		a) For items marked '*' thus, data to be furnished / confirmed by Vendor.					
		b) For items marked '**' thus, data to be given / confirmed by Purchaser after placement of order.					
		c) Makes of all components shall be subject to Purchaser's approval.					

Plant 1.0 MTPA ALUMINA REFINERY STREAM-5	DRY TYPE TRANSFORMER Part-IIIA - Notes on Method of Offer Submission	<div>नालको  NALCO</div> <div>नेशनल एल्युमिनियम कम्पनी लिमिटेड</div> <div>National Aluminium Company Ltd.</div>					
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1. Offer shall be submitted in two parts viz. *Technical* part and *Price* part.
2. Technical part shall consist of following:
 - a. Copy of “**General Specifications**” of this specification with acceptance of all clauses to be indicated by letter 'A' on right side of the specification sheet with seal of the company and initial of authorised person. Deviations, if any, should be indicated by letter 'D'.
 - b. Copy of “**Design Data Sheet**” of this specification duly filled in clearly and legibly in the assigned space against items marked thus '*', along with all documents requested with the offer.
 - c. Copy of “**Scope of Supply & Schedule of Prices**” of this specification marked 'quoted' against each item, to confirm that the vendor is making an offer as per break up requested therein.
 - d. “**Inspection Test Plan**” of this specification with acceptance of all clauses to be indicated by letter 'A' and duly signed.
 - e. Covering letter enclosing above document.
 - f. Filled up “**Compliance Declaration**” of this specification with seal of the company and initial of the authorized person.
 - g. Separate “**List of Deviations**” shall be submitted clearly indicating document no., part no., page no., clause/ requirement as per enquiry, and deviation taken
3. Price part shall consist of following:
 - a. Copy of “**Scope of Supply & Schedule of Prices**” of this specification with unit rate of each item and total price of each section, with total price of the tender, including supplies and various services as specified or as recommended by the vendor.
 - b. Covering letter enclosing above price part and deviation on commercial terms if any.
4. Both the parts of offer shall be submitted in separate sealed envelope indicating details of offer such as *Technical* or *Price* part, enquiry no. and date of submission.
5. Offer will be evaluated based on above documents only and any other document enclosed with the offer shall not be considered for evaluation of offer.

Plant 1.0 MTPA ALUMINA REFINERY STREAM-5	DRY TYPE TRANSFORMER Part-IIIB - Scope of Supply & Schedule of Prices	<div style="text-align: center;">  नालको NALCO नेशनल एल्युमिनियम कम्पनी लिमिटेड National Aluminium Company Ltd. </div> <div style="display: flex; justify-content: space-between; font-size: small;"> Rev 00 Page 1 of 1 </div>
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EQUIPMENT & SERVICES TO BE FURNISHED UNDER THIS SPECIFICATION

Sr. No.	Description	Quantity
1.	Following transformers complete with all accessories in accordance with this specification (Part-I & Part-II): A) 750 kVA, 6.6 / 0.72 kV, * %Z, VPI type transformer	3 Nos.
2.	MANDATORY SPARES i. HV bushing complete with metal parts ii. LV bushing complete with metal parts iii. LV neutral bushing iv. Set of gaskets for transformer v. Temperature Scanner / Indicator vi. Door Limit Switch	Included in Sr. No.1 above 1 no. 1 no. 1 no. 1 set 1 no. 1 no.
3.	TESTING & INSPECTION Tests as specified in Part-IV of this specification shall be performed in presence of Purchaser's representative. i. Routine tests ii. Type tests iii. Special tests	 Included in Sr. No. 1
4.	Commissioning Spares Commissioning spares as required shall be provided by vendor. Vendor to furnish separate list. In case, vendor does not recommend any commissioning spares, then vendor shall confirm that if any spares required at the time of commissioning, the same shall be supplied without any time and cost implication.	Included in Sr. No. 1
5.	One years Operation and Maintenance (O&M) Spares Vendor shall furnish separately a complete list of Operation and Maintenance spares with their Unit Rate indicated alongside. (Unit rates for items if required to be operated later)	1 Lot

without any additional cost and within agreed time schedule.

	DRY TYPE TRANSFORMER Part-V - Compliance Declaration			 नालको NALCO नेशनल एल्युमिनियम कम्पनी लिमिटेड National Aluminium Company Ltd.
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Compliance Declaration

Please note that vendor shall indicate his replies to the following points without which the offer shall be liable for rejection.

Deviations if any from this specification shall be listed in the enclosed format (List of Deviations) indicating the applicable specification clause. The vendor will be made liable for full compliance with the specification requirements, if deviations are not listed in "List of Deviations" as it will be deemed as "No deviation".

S.NO.	DESCRIPTION	EXPECTED REPLY	CONFIRMATION BY VENDOR	REMARKS
1.	Confirm that all deviations against this specification are consolidated under "List of Deviations". Deviations mentioned elsewhere will not be taken into consideration.	No Deviation		
2.	Confirm that there is no discrepancy in the technical details outlined in the specification and the technical bid data.	No Discrepancy		
3.	Relevant Catalogues/ literature giving specifications for all models offered including sizing data is enclosed with the offer.	Not Applicable		
4.	Relevant Catalogues/ specifications of all bought out items are enclosed with the offer.	Yes		
5.	Quoted for "Spare parts recommended for 1 years continuous trouble-free operation" along with listing	Not Applicable		
6.	Quoted and offered recommended Commissioning spares along with listing	Not Applicable		
7.	Quoted for "Mandatory spares"	Quoted		
8.	Confirmed all guarantees as per cl. 4.0 of Part-I	Confirmed		


(Signature of Vendor)

Name:

Designation :

Date :

(Company Seal)

	DRY TYPE TRANSFORMER Part-V - Compliance Declaration			 नालको NALCO नेशनल एल्युमिनियम कम्पनी लिमिटेड National Aluminium Company Ltd.
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LIST OF DEVIATIONS

	Doc. No:			
Sr. No.	Clause No	Page No	Subject / Description	Deviation

(Signature of Vendor)

Name:

Designation :

Date :

(Company Seal)

1000000

[illegible]

NATIONAL ALUMINIUM COMPANY LIMITED

5TH STREAM ALUMINA REFINERY EXPANSION PROJECT

GENERAL PURCHASE CONDITIONS (INDIGENOUS) (FOR SUPPLY)

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NATIONAL ALUMINIUM COMPANY LIMITED (hereinafter referred to as Owner) intends to procure machinery, equipment, materials and other items for their Alumina Refinery Expansion Project under the terms and conditions set out hereunder:

1.0 DEFINITIONS:

Following expressions used in these terms and conditions and/or in the Purchase Order shall have the meaning as detailed hereunder against each of them.

- | | |
|----------------------------------|---|
| ORDER | - Supply, delivery & completion of obligations in accordance with the requirements defined in NALCO's Purchase Order (including all attachments and exhibits thereto) together with any subsequent modifications thereof. |
| SELLER | - A firm or a company or persons to whom the order is issued and includes its successors and assignees. |
| OWNER | - NATIONAL ALUMINIUM COMPANY LIMITED (NALCO) , a Company incorporated in India having its Registered Office at NALCO Bhawan, P/1, Nayapalli, Bhubaneswar-751013, Odisha including its successors and assignees. |
| CONSULTANT | - tkIS (Thyssenkrupp Industrial Solutions (India) PVT Ltd.) having its Registered Office at Mumbai who are acting as Consultant for and on behalf of the Owner or any other consultant who may be appointed by the Owner. |
| GOODS/MATERIALS | - Goods and/or materials, shall mean any of the articles, materials, machinery, equipments supplies, drawings, data and other property and all services/work including but not limited to design, manufacture, delivery, installation, inspection, testing and commissioning specified or required to complete the Purchase Order. |
| Contractual Delivery Date | - Contractual delivery date is the date by which goods shall be delivered F.O.R. dispatching point/destination in accordance with the terms of the Purchase Order. The contractual delivery date/period is inclusive of all the lead time for engineering, procurement of raw materials, manufacturing, inspection, testing, packing and any other activity whatsoever required to be accomplished for effecting the delivery at the agreed delivery point. |

Procurement Coordinators- Owner's authorized representative appointed as
/Manager procurement coordinators/ Managers

INSPECTORS - Inspectors deputed by Owner or Procurement Coordinators/Managers and Consultants.

PROJECT - NALCO's 5th Stream Alumina Refinery Expansion Project.

‘Plant’, ‘Equipment’, ‘Works’ shall mean and include plant stores and materials to be provided and work to be done by the Seller.

‘Commercial Operation’ shall mean the condition of operation in which the complete equipment covered under the Purchase Order is officially declared by the Owner to be available for continuous operation at different loads upto and including rated capacity.

2.0 REFERENCE FOR DOCUMENTATION:

Purchase Order number must appear on order confirmation correspondence, drawings, invoices, shipping notes, packing and/or any documents or paper connected with the order.

3.0 ACCEPTANCE OF ORDER:

This order is expressly conditioned on Seller's acceptance of all the terms and conditions hereof and constitute the entire agreement between parties hereto. With the acceptance of the Order, Seller waives and considers as void all his general sales conditions. The Seller shall sign, stamp and date two copies of the Purchase Order and return within ten days after receipt of Order one copy to owner and the other to TKIS as token of having accepted the order without reservation. Notwithstanding such non-return as stated above, the order shall be deemed to have been accepted with these conditions unless there is an express, communication in writing by the Seller to that effect with specific reasons and details.

4.0 SALES CONDITIONS:

Seller's Standard Sales Conditions, if any, shall not be applicable to the offer and only the Purchaser's General Purchase Conditions shall apply with the exception of deviations specifically agreed between the Seller and the Purchaser and/or brought out in the Purchase Order.

5.0 COMPLETE AGREEMENT:

The Terms & Conditions of the Purchase Order constitute the entire Agreement between the parties hereto. Changes will be binding only if the amendments are made in writing and signed by an authorized representative of the Owner and the Seller.

6.0 MODIFICATIONS & AMENDMENT:

Notwithstanding the above, Owner shall have the right to modify or amend this order subject to an adjustment in the price and/or delivery date in accordance with the applicable provision of the order, if any, or pursuant to mutual agreement.

The Seller shall carry out such amendments to the Order and shall be bound by the same terms and conditions incorporated in the original order.

Claims, if any, for adjustment in Price /delivery date shall be made within fifteen (15) days from the date when revisions/changes are ordered, failing which it will amount to an absolute waiver of any such claim. Such claims shall not prejudice the rights of Owner to claim a refund of any amount advanced or paid to the Seller.

7.0 DELAYS OR NON-DELIVERY:

Time of delivery at every stage of activities is the essence of this Order till the completion date and no variation shall be permitted except with prior authorization in writing from the Owner.

Where no delivery period is expressly stated, it shall be constructed as Seven days from the date of placing the order. The Owner reserves the right to defer the period of delivery in writing.

Goods shall be delivered in accordance with the Order to such place(s) as is specified therein and at such time(s) as Owner or its authorized representative shall have notified to the Seller in response to the Seller's request for instructions.

If upon receipt of the order at any time thereafter it is found that the goods or materials called for can not be completed within the time specified in the order, notice thereof must be given immediately and at the earliest possible time well in advance of the due date of delivery together with reasons for delay by fax/e-mail and confirmed by Registered mail to Owner together with the best completion date that can be offered. Such notice should not be construed as acceptance of the revised date by the Owner, unless specifically so communicated by the Owner in writing. Failure to deliver the goods or material before the date specified in the Order shall entitle the Owner at its option to terminate the order under provisions stated in Article 8 without prejudice to any other rights, TKIS/Owner may have as a result thereof. The mere acceptance of revised schedule as above will not absolve the Seller from any of its liabilities for such delivery.

8.0 TERMINATION/CANCELLATION

- (I) Owner may at any time, terminate any part of the work or all works remaining to be done in connection with this order with effect from such date as Owner may specify upon such terms and conditions as may be indicated at time of such termination.

Owner shall have the right to buy at its option and at an agreed price from the Seller, the cancelled goods and components and also to recover all materials supplied by the Owner to the Seller for use on the Order.

In the event of a termination of the order or part thereof, the Seller shall forthwith carry out instructions of the Owner in connection of sub-orders the Seller may have placed with other suppliers.

Owner and/or their authorized representatives shall have free access to the Seller's works and those of their suppliers to examine the materials and fabrication status reached at time of the order cancellation and to agree to a reasonable price with the Seller and to take over the goods on as is where is basis or on completion.

If cancellation/termination of the Order, whether in full or in part is caused by reasons attributable to the Seller, Seller agrees to reimburse Owner, the extra cost incurred by Owner in procuring the cancelled goods from other resources. Security deposit, if any, shall be liable for forfeiture.

Without prejudice to the generality of the terms, breach of contract, the following will also include such breach and/or will entail termination of the order:

- (a) The Seller fails to comply with the terms of this Purchase Order.
- (b) The Seller fails to deliver the goods on time and/or replace the rejected goods promptly.
- (c) The Seller becomes bankrupt or goes into liquidation.
- (d) The Seller makes a general assignment for the benefits of creditors.
- (e) A receiver is appointed for any of the properties owned by the Seller.
- (f) Any reason directly attributable to Seller different from Sl. No. (a) to (e).

The Seller is aware that the said goods are required by the Owner for the ultimate purpose of material production and that non delivery may cause loss of production and consequently loss or profit to the Owner. In the event of the Owner exercising the option to claim damages for non-delivery other than by way of difference between the market price and the contract price, the Seller shall pay to the Owner, the fair compensation to be agreed upon between the Owner and the Seller.

- (II) Owner may, if considered necessary, cancel/terminate the order either in full or in part, without assigning any reasons whatsoever and take necessary action for Procurement repairing, rectification, etc. at the risk and cost of the Seller.

9.0 ASSIGNMENT AND SUBLETTING:

Except for raw materials or any part of this Order for which the makers are named in this Order, the Seller shall not assign the Order or any part thereof, or any monies due hereunder, or subject this order or any part thereof, without the prior written consent of Owner or its authorized representative.

All sub-orders shall bear Owner's Order Number and shall contain the following words, "The equipments/materials being supplied against this Order is subject to inspection/expediting by NALCO and/or their assigned representatives including the insurance authority of NALCO.

The Seller agrees to furnish to Owner or its authorized representative, three unpriced copies of all sub-orders issued for raw materials and components within seven days of placement of such sub-orders.

10.0 FORCE MAJEURE:

Shall subject to its being a direct impact on the execution of this order, mean and be limited to the following:

- (a) Any war /hostilities.
- (b) Any riot or civil commotion
- (c) Any earthquake, flood, tempest, lightning or other natural physical disaster.
- (d) Any strike or lock-out (only those exceeding ten (10) continuous days in duration) affecting the performance of the Seller's obligation.
- (e) Major power-cuts for a consecutive minimum period of 30 days.
- (f) Any restriction imposed by the Government (Central or State) or other Statutory bodies which prevents/delays the execution of the order by the Seller.

The Seller shall advise Owner or its authorized representative by a registered letter duly certified by Local Chamber of Commerce or Statutory authorities, the beginning and end of the above causes of delay within seven (7) days of occurrence and cessation of such Force Majeure conditions. In the event of delay lasting over one month, if arising out of causes of Force Majeure, Owner reserves the right to cancel the order and provisions governing Termination/Cancellation stated under Article 8 shall apply.

For delays arising out of Force Majeure, the Seller shall not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force majeure, and neither Owner nor Seller shall be liable to pay extra costs provided it is mutually established that Force Majeure Conditions did actually exist.

The delivery date specified on the order takes into account the extent of Force Majeure conditions prevalent in Seller's Works (such as power restrictions, etc.) at the time of acceptance of order and no extension to delivery date shall be allowed on this account.

11.0 INSPECTION AND EXPEDITING:

All inspections and tests shall be made as required by the specifications attached to or made part of the order and/or amendments issued by Owner. All goods or materials shall be subject to inspection by Owner or Owner's authorized representatives. Such tests and/or inspections by TKIS may be held in conjunction with the representatives of the Owner/Insurance Authority.

Inspector shall have the right to carry out the inspection and testing which will include the raw materials at manufacturer's shop/place at fabricator's shop and at time of actual dispatch before and after completion of packing.

Seller shall advise the Owner or its authorized representative in writing, as the circumstances warrant at least fifteen (15) days in advance of the date of the final tests and/or inspection.

Owner's representative or consultant's inspector shall be authorized inspection spokesman and all matters including the Owner's Insurance Authority requirements shall be handled with the Seller through such inspector. Such inspection, or failure to inspect shall in no way relieve the Seller of any responsibility or liability with respect to such materials nor prejudice the right of Owner/its authorized representative to reject unsuitable material after arrival at the destination.

All tests, mechanical and others and particularly those required by codes will be performed at Seller's expenses and in accordance with Inspector's instructions. The Seller will also bear the expenses concerning preparation and rendering of tests required by Boiler Inspectorate or such other statutory testing agencies or by Lloyds Register Industrial Services or any other agency as may be required. For non-IBR items, inspecting authority shall be Owner or its authorized representative.

Unless specifically stated to the contrary on the order, all expenses relevant to inspection and expediting, preparation of test report or certificate, etc. shall be borne by the Seller EXCEPT for the salaries, fees, travelling, lodging and boarding expenses of Owner's representatives.

The Seller shall:

- Inform Procurement Coordinators/Managers at least eight days in advance of the exact place, date and time of rendering the equipment of materials for required inspection.
- Provide free access to inspectors during normal working hours to vendors or his/its sub-vendor's works and place at their disposal all useful means of performing, marking, testing, inspection and final stamping.

The Seller shall submit to TKIS within four weeks from the date of this Order a Bar-Chart showing start and finish dates for various activities forming part of the execution of this order and identifying the delivery dates to this activity schedule. Seller shall update this Bar-Chart every month showing the actual performance of the activities and how the delivery date has been affected thereby. Copies of the updated Bar charts

will also be submitted to Owner or its authorized representative for review of the progress of the Order. Seller shall also furnish un-priced copies of suborders/sub contractors, phased Programme of item wise manufacturing, testing and delivery and any other information/documentation as may be called for by Procurement Coordinators/Managers.

When deemed advisable by Owner or its authorized representative, the Order and Seller's sub-orders shall be subject to personal expediting by Owner's representatives. Such expediting shall in no way relieve the Seller of the time or delivery obligations under the terms of the order. At all reasonable times and places, before, during and after manufacture, the Seller shall grant and provide access to Owner or its authorized representative to all parts of the Seller's work and their Sub-supplier's works involved in the manufacture or processing of the goods or materials. All post order correspondence shall be addressed to the designated person of TKIS ..with copies to the Owner.

12.0 OFFICIAL INSTITUTIONAL TESTING:

In addition to testing and inspection by inspectors mentioned above, Lloyds Register Industrial Services or similar institutional agencies like Boiler – Inspectorate may be assigned for official testing of all coded equipment. The Seller shall ensure that all Procedures for preparation and Performance of test prescribed by such Institutions shall be completed scrupulously.

The Seller is required to send to such Institutions as may be designated by the Owner at least three sets of construction drawings for each equipment and calculations. All manufacturer's mill test certificates and analytical reports from material laboratories in respect of all raw material and components employed shall have to be presented to such institution's inspectors in the number of copies required. Seller shall be responsible for any delay in submission of necessary certificates. The Seller shall maintain close liaison with Procurement Coordinators and Institution's Inspectors to maintain Schedule and delay if any, in this process will not be taken into consideration as a cause of Force Majeure.

13.0 WEIGHTS AND MEASUREMENTS:

All weights and measurements recorded by Procurement Co-ordinators/managers on receipt of goods at the site will be treated as final and binding on the Seller.

Sellers shipping documents and invoices must contain the following data :

- (i) Unit net weight
- (ii) Unit gross weight (packing included)
- (iii) Dimensions of packing.

14.0 OIL & LUBRICANTS:

The first filling oils and lubricants, if any, required for every equipment shall be included in the price. The Seller shall also recommend the quality and quantity of oils and lubricants required for one year continuous operation.

15.0 SPARE PARTS:

The Seller must furnish item wise and priced list of spare parts required for two year's operation of the main equipment and prime movers also.

The Seller shall provide the necessary cross sectional drawing to identify the spare parts numbers and their location as well as interchangeability chart.

16.0 GUARANTEE:

All goods or materials shall be supplied strictly in accordance with the specifications, drawings, data sheets, other attachments and conditions stated on the order. No deviation from such specifications or alternations of these conditions shall be made without TKIS's/Owner's agreement in writing which must be obtained before any work against the order is commenced. All materials furnished by the Seller pursuant to this order (irrespective of whether engineering, design data or other information has been furnished reviewed or approved by TKIS and Owner) are guaranteed to be of the best quality of their respective kinds (unless otherwise specifically authorized in writing by TKIS/Owner) and shall be free from faulty design to the extent such design is not furnished by TKIS/Owner workmanship and materials, and to be of sufficient size and capacity and of proper materials so as to fulfill in all respects all operating conditions, if any, specified in this order.

Checking of Seller's drawings by procurement Coordinators/Managers and their approval and permission to ship or dispatch the equipment and materials granted by Inspectors shall not relieve the Seller of any part of his/its responsibilities of proper fulfillment of the requirements.

If any trouble or defect originating with the design, materials, workmanship or operating characteristics of any materials arise at any time prior to twelve (12) months from the date of the first commercial operation of the Plant of which the materials supplied under this order form a part thereof, or thirty (30) months from the date of last dispatch/shipment, whichever period shall first expire and the Seller is notified thereof. Seller, at its own expense and as promptly as possible make such alterations, repairs and replacements as may be necessary to permit the materials to function in accordance with the specifications and fulfill the foregoing guarantees.

TKIS/Owner may, at its option, remove such defective materials, at Seller's expense, in which event Seller shall, without cost to TKIS/Owner and as promptly as possible, furnish and install proper materials. Repaired or replaced materials shall be similarly guaranteed for a period of not less than twelve (12) months starting from the date on which the replacement are put in service or thirty (30) months from the date of despatch/shipment. In the event that the materials supplied do not meet the specifications and/or are not in accordance with the drawings, data sheets or the terms of this order and rectification is required at Site, TKIS/Owner shall notify the Seller giving full details of deficiencies. The Seller shall attend the site within seven (7) days of receipt of such notice to meet and agree with the representatives of TKIS/Owner the action required to correct the deficiencies. Should the Seller fail to attend meeting at site within time prescribed above, TKIS/Owner shall immediately

rectify the works/materials and Seller shall reimburse TKIS/Owner ~~at~~ all costs and expenses incurred in connection with such trouble or defect.

The Seller shall furnish a bank guarantee (as per proforma hereunder) to support Seller's performance. This bank guarantee shall not be deemed a waiver of any right of the Owner or Procurement Coordinators/Managers to insist upon the strict performance thereof or of any of his or their right or remedies as to any such goods regardless of when goods are shipped, received or accepted nor shall any purported oral modification or revision, the order by Procurement Coordinators/Managers act as waiver of the terms hereof.

17.0 PATENT INDEMNITY:

The Seller shall fully indemnify TKIS/Owner, vendors and users of the materials furnished hereunder, against any action, claim or demand, costs and expenses, arising from or incurred by reasons of, any infringement or alleged infringement of any letters Patent, registered design, Trade Mark or name, Royalties copy right or any other protected rights in respect of any materials supplied or any arrangements, system or methods of using, fixing or working used by the Seller.

The prices quoted by the Seller shall include all charges for Royalties payable in respect of the use of any letters patent, registered design, Trade Mark or name, drawing or technical information which may be involved in the performance of this order or in the construction or use of any plant, material or apparatus supplied by the Seller.

In the event of any claim or demand being made or action brought against TKIS/Owner in respect of an of the aforesaid matters, the Seller shall be notified thereof immediately and the Seller shall, at its own expense with (if necessary) the assistance of TKIS/Owner (whose all expenses shall be reimbursed by the Seller) conduct all negotiation for the settlement of the same and/or any litigation which may arise therefrom.

18.0 LIABILITY AGREEMENT:

Seller shall defend and hold TKIS/Owner harmless from all claims and liability for injuries to and/or death of any and all persons and for loss of and/or damage of property caused in whole or in part by the negligence or willful acts of the Seller, arising under or by reasons of materials furnished hereunder including without limitation, the installation, erection, repair rectification, adjustment or operation of the materials covered by this order.

In addition, Seller, shall, if he elects to utilize materials, tools, equipment or facilities made available to Seller by TKIS/Owner for use by the Seller and not to be incorporated in the work, as additional consideration thereof, defend and save TKIS/Owner harmless from all claims and liability for injuries to, and/or death of any and all persons, and or loss of and/or damage to property resulting from or by reasons of the Seller's utilization thereof, whether or not caused partially or totally by the

negligence of TKIS/Owner employees, contractors, sub-contractor's, agent or representative.

In any case where it is necessary for employees or representatives of Seller to go upon the premises of TKIS/Owner, Seller agrees to assume full responsibility for the proper conduct of such employees/representatives while on the said premises and to comply with all applicable workmen's Compensation Laws, other applicable government regulations and ordinances and all plant rules and regulations particularly in regard to safety precautions and fire hazards. If this order requires Seller to furnish labour at site, Seller shall furnish Owner with a certificate, or other evidence satisfactory of Owner indicating that such labour is adequately covered by Workmen's compensation Insurance and Employer's Liability Insurance with limits acceptable to TKIS/Owner.

The Seller shall also procure and keep in force at his own cost comprehensive Automobile Liability Insurance for adequate coverage in respect of all his vehicle visiting or plying in project premises. The Seller shall also be responsible for compliance of existing laws in respect of their workmen and employees.

19.0 PRICES:

Unless otherwise specified in the order, the order price shall remain firm and will not be subject to any escalation of imposition, any description during the pendency of the order, notwithstanding the change in the cost of materials, labour and/or variations in taxes, duties and other levies on materials and components that may take place while the order is under execution, even if the execution of the order is delayed beyond the delivery period/completion date specified in the order for any reason whatsoever.

The price shall be:

- a) Inclusive of adequate packing and forwarding charges for delivery terms on F.O.T. despatch point and freight whenever F.O.T. destination delivery terms are agreed to but exclusive of transit insurance.
- b) Exclusive of applicable GST which is leviable by law on sales of finished goods to Owner. The nature and extent of such levies shall be shown separately.

Divisibility of Order

Unit prices and discounts, if any, shall be applicable for ordering without any stipulation of Minimum order value or on the basis of total order for items covered in the requisition.

20.0 TAXES, DUTIES, UNEMPLOYMENT BENEFITS, ETC.:

GST applicable at the destination on the finished goods alone will be payable by the Owner at actuals against documentary evidence to be furnished by the Seller. All other taxes, duties, levies and impost will be to the Seller's account.

The Seller accepts full and exclusive liability for the payment of any and all applicable taxes (CGST, SGST, IGST, UTGST), levies and statutory payments payable under all or any of the prevailing Central/ State statutes.

The Seller shall comply with all the provisions of the GST Act/ Rules/ requirements like providing of tax invoices, payment of taxes to the authorities within the due dates, filing of returns within the due dates etc. to enable NALCO to take Input Tax Credit. The vendor shall also comply any modification in the prescribed rules by GST council/ appropriate authority from time to time during execution of the contract.

In case, NALCO is not able to take Input Tax Credit due to any noncompliance/ default/negligence of the seller, the same shall be recovered from the pending bills/dues (including security deposit, BG etc.).

Seller shall be responsible to indemnify NALCO for any loss, direct or implied, accrued to NALCO on account of supplier's failure to discharge his statutory liabilities like paying taxes on time, filing appropriate returns within the prescribed time etc

Seller shall adjust taxes, duties, cess or levies wherever required if the Owner furnishes exemption certificates even retrospectively.

Seller hereby accepts exclusively liability for and agrees to Indemnify Owner against liability for the payment of any and all contributions or taxes for unemployment insurance, old age pensions or annuities or other purposes prevalent under the present legislation or hereafter imposed by the Govt. of India/or by any unit or sub-division or authority thereof, which are in whole or in part measured by and/or based upon the wages, salaries or other remuneration paid to persons employed by Seller on work in connection with this order.

21.0 CONTROL REGULATIONS:

The supply, despatch and delivery of goods shall be arranged by the Seller in strict conformity with the statutory regulations including provisions of Industries (Development and Regulation) Act, 1951 and any amendment thereof as applicable from time to time. The Owner disowns any responsibility for any irregularity or contravention of any of the statutory regulations in manufacture or supply of his stores covered by this order.

22.0 TERMS OF PAYMENT:

The Owner will make payments, as they fall due, to the Seller directly for the goods and materials purchased or released under this order in accordance with the relevant terms of the order, on satisfaction that, the goods or materials furnished by the Seller and the invoices therefor, are in accordance with the payment terms and all other conditions of this Order. However, such payments will not be deemed to constitute acceptance of goods if the goods are later found to be defective.

Such delay in receiving invoices in the number of copies specified, (or errors and omissions) or failure or delay in providing the documents and/or certificates required

in the order, or failure to comply with the provisions of owner Invoicing Instructions shall be considered just cause for withholding payment without loss of discount privilege, and any demurrage or wharfage resulting thereby shall be borne by Seller's invoices and documents shall be negotiated strictly in the manner specified in the order and all bank charges, if any, shall be to the Seller's account.

The time for payment of invoices or for accepting any discounts offered shall be only from the date of approval specified in the order or receipt of Seller's correct invoices whichever is later.

All costs, damages or expenses for which the Seller is liable under this order may be deducted from moneys, due or becoming due to the Seller or may be recovered by action at law or arbitration pursuant to Article 37.

Terms of payment shall be as follows, unless otherwise specified :

90% against despatch documents through Owner's bank. All bank charges will be to Seller's account.

10% balance within 30 days of receipt and acceptance of Equipment/Material at project site against a Performance Bank Guarantee as a security for the like amount from any Nationalized Bank valid till 30 months from the date of last receipt at site as per Owner's Standard Proforma on an appropriate value of Stamp Paper (in case of P.O. value upto Rs. Ten Lakhs) The Performance Bank Guarantee will be released after the expiry of the period of Performance Guarantee.

Necessary Contact cum Performance Bank Guarantee separately @ **10.00%** of P.O. value **along with applicable GST** as a security to be submitted within 30 days of TOI/Brief Order, in case P.O. value is more than Rupees Ten Lakhs. The Contract cum Performance Bank Guarantee will be released after the expiry of the period of Performance Guarantee.

Financial settlement of Seller's invoices is liable to be withheld/balance 10% payment shall not be released, unless the vendor furnishes prints/reproducibles of approved drawings as specified in vendor data requirement, data, full documentation, manual as called for in Purchase Order and a list of all the dispatches of material made against the Purchase Order.

A certificate to the effect that nothing is due to the Seller from Purchaser (No dues certificate/No claim Certificate) shall form part of the documents to be submitted while claiming last payment/final payment/or in case of full payment.

23.0 PRICE REDUCTION SCHEDULE FOR DELAYED DELIVERY:

The time and date of delivery of stores/materials/equipment as stipulated in the order shall be deemed to be the essence of the contract.

If any delay is anticipated by the Seller in the delivery of the material(s) beyond the stipulated date(s) of Delivery, the Seller shall forthwith inform NALCO in writing of such anticipated delay and of the steps being taken by the Seller to

remove or reduce the anticipated delay, and shall promptly keep NALCO informed of all subsequent developments.

Unless and otherwise specified, in case of delays in completion of the order, the Owner will have the following rights:

- (i) Should the Seller fail to complete the order on or before the completion data specified in order or any extension granted thereto in writing by Owner shall have the right to recover from the Seller 1/2% (half percent) of the order price of goods or materials not supplied and/or unfinished, per week or part week of delay thereof, subject to a maximum 5% (five percent) of the total order price, **along with applicable GST**. Such reduction of prices shall not relieve the Seller of his delivery obligations under the order, or any other rights of the Owner.
- (ii) Cancel the order in part or full without any liability/cancellation charges and purchase such cancelled quantities from elsewhere on account and at the risk of the Seller, without prejudice to its rights under (i) above in respect to goods delivered.

24.0 REJECTION, REMOVAL OF REJECTED GOODS & REPLACEMENT

In case the testing and inspection at any stage by Inspectors reveal that the equipment, materials and workmanship do not comply with specification and requirements, the same shall be removed by the Seller at his/its own expense and risk within the time allowed by the Owner. The Owner shall be at liberty to dispose of such rejected goods in such manner as he may think appropriate. In the event the Seller fails to remove the rejected goods within the period as aforesaid all expenses incurred by the Owner for such disposal shall be to the account of the Seller. The freight paid by the Owner, if any, on the inward journey of the rejected materials shall be reimbursed by the Seller to the Owner before the rejected materials are removed by the Seller.

25.0 STATUTORY REQUIREMENTS

Seller warrants that all goods and materials covered by this Order have been produced, supplied, sold, dispatched, delivered and furnished in strict compliance with all applicable laws, regulations, labour agreements, working conditions and technical codes and requirements as applicable from time to time. Seller shall execute and deliver such documents as may be required to affect or to evidence such compliance. All laws and regulations required to be incorporated in agreement of this character are hereby deemed to be incorporated by this reference. The Seller shall furnish the industrial license number or pertinent details to show whether he has a valid license to manufacture the subject machinery, equipment and materials ordered on them under Industries (Development & Regulations) Act or any other applicable statute or whether he is an authorized representative of a licenced manufacturer and has a valid license. Owner disowns any responsibility for any irregularity or contravention of any of the statutory regulations in the manufacture or supply of goods covered by this order.

The Seller shall ensure compliance with the above by all his sub-vendors/suppliers and shall indemnify Owner or its authorized representative against any actions, damages, costs and expenses of any failure to comply of aforesaid.

26.0 TRANSIT RISK INSURANCE:

Covers for finished goods from Seller's works upto the time of delivery at the storage yard/warehouse of Owner shall be furnished by the Owner. The Seller shall furnish immediately on booking each consignment all information required to arrange transit risk insurance. This shall in no way relieve the Seller of his responsibility to provide proper packing and protection as stated elsewhere in this order. The Seller shall also furnish the despatch particulars to underwriters, TKIS and Owner immediately.

27.0 PACKING, CRATING, MARKING, FORWARDING, CARTAGE/SHIPMENT:

The cost of all special Packing, boxing, marking, crating or cartage is included in the price specified on the face of this order unless otherwise specifically agreed to in this order.

All packing, boxing, crating, marking, forwarding and cartage/shipment shall conform to the specifications or requirements detailed in the respective attachment to the Order. The Seller shall be held liable for damage or breakage of the goods due to defective or insufficient packing or protection. The Seller shall not charge anything extra for such packing or any dues or levies on packing or protection.

28.0 NON-CONFORMANCE:

Owner reserve the right to claim damages for use of defective or sub-standard goods supplies by the Seller irrespective of the fact whether goods were inspected by Owner or its authorized representative or not and without prejudice to rights of Owner for any other action.

29.0 NON ASSIGNMENT:

The Seller shall act as an independent agency and not as an agent or employee of Consultant/Owner and the Seller shall not assign or sub-contract this order any part thereof or any money to become due hereunder, without the prior written consent of owner/authorized representative.

Any such permitted assignment or sub-contracting shall not relieve the Seller of any of his obligation against this order. The Seller shall be bound to execute the contract notwithstanding any change in Seller's constitution. In the event of any change in the constitution of the Seller, the contract will be liable to be terminated by the Owner.

30.0 NON-WAIVER:

Failure of the Owner or its authorized representatives to insist upon strict performance of any of the terms and conditions incorporated in the Order, failure or delayed to exercise of any rights detailed here failure to properly notify the Seller in the event of

breach of any obligations contained herein, shall not constitute a waiver of any other obligation contained herein. Any waiver to be effective must be in writing.

31.0 RECOVERY OF SUMS DUE:

Whenever any claim against the Seller for payment of sum of money arises out of or under the contract the Owner shall be entitled to recover sums from any sum then due or which at any time thereafter may become due from the Seller under this or any other contract with the Owner and should this sum be not sufficient to cover the recoverable amount, the Seller shall pay to the Owner on demand the balance remaining due.

If any details shown on the drawings are omitted from the specifications or vice-versa, the Seller shall notwithstanding such omissions, supply in accordance with such details and shall be deemed to have included the cost for such work in the price.

The Seller shall treat as confidential all information (whether written or otherwise) supplied by TKIS/Owner hereunder and shall use his best endeavors to ensure that such information is not divulged to any third party except where necessary for the purpose of performance of this order by the Seller, of course, with the consent of TKIS/Owner. In such cases, Seller shall ensure that third parties in question undertake a similar obligation of confidence. This obligation does not apply to information, which at the time of disclosure is in the public domain or is in the Seller's lawful possession without restriction on disclosure.

The Seller shall be required to sign a secrecy agreement for certain proprietary items of equipment which will be specified by Owner later.

32.0 PART ORDER, REPEAT ORDER:

Seller hereby agrees to accept part order at Owner's option without any limitation whatsoever and also agrees to accept repeat order(s) during a period of twelve months from the date of original Purchase Order on same unit prices, terms & conditions as that of the original purchase order.

33.0 TECHNICAL INFORMATION:

Drawing, specifications and details shall be the property of the Owner and shall be returned by the Seller on demand. The Seller shall not make use of drawings and specification for any purpose at any time save and except for the purpose of the Owner.

The Seller shall not disclose the technical information furnished to or gained by the Seller under or by virtue of or as a result of the implementation of the Purchase Order to any person, firm or body or corporate authority and shall make all endeavors to ensure that the technical information is kept CONFIDENTIAL. The technical information imparted and supplied to the Seller by Owner shall at all times remain the absolute property of the Owner.

34.0 HEADINGS:

The headings of the conditions hereof shall not effect construction thereof.

35.0 MATERIALS FURNISHED BY TKIS/OWNER:

If specifically agreed to in the Order, Owner shall furnish to the Seller such materials/equipment (hereinafter called Owner's materials) as agreed for incorporation into the manufacture, fabrication, testing or processing of the goods or materials subject to availability.

Owner's materials shall be consigned on "freight paid basis" to the nearest Railway point to Seller's works to which railway will accept the consignment depending upon the nature of the consignment (whether wagon load/small). Seller shall arrange to promptly collect such materials from the Railways and transport to his works at Seller own cost. Any duty, ~~octroi~~ or local taxes levied by the local bodies at the Seller's end will be to the account of the Seller.

Seller shall arrange to properly store and provide adequate security and protection to Owner's materials. Seller shall be solely responsible for the safe keeping of such materials and shall indemnify TKIS and Owner against any loss or damage due to misuse or misappropriation whatsoever of Owner's materials while in the possession of the Seller or his sub-suppliers. The property in such goods shall always remain with the Owner and the title in such goods will not pass to the Seller's.

The Seller shall arrange to provide at his own cost and experience the necessary insurance cover against all risks for owner's materials.

Seller shall, if required by Consultant/Owner, furnish a Bank Guarantee/Insurance Bond equal to the total value of free issue materials and such guarantees shall remain valid till the material accounting towards satisfactory utilization and the return surplus free issue materials are completed.

The Seller shall maintain systematic records of receipt and issue of Owner's materials and shall be accountable at all times to Consultant/Owner regarding the utilization thereof.

Unused surplus materials or scrap from material supplied by the Owner to the Seller shall be returned by the Seller to the Owner or if the Owner so directs the Seller may dispose of the same by sale or otherwise on such terms and conditions as the Owner may stipulate and the Seller shall pay to the Owner the sale proceeds of the material so disposed off by the sale deducting therefrom expenses incurred by the Seller on such sale, the quantum of such deduction to be mutually agreed upon in advance between the Owner and the Seller.

For such of Owner's materials which the Seller can not return within a reasonable time (not exceeding 2 months from the date of last despatch of equipments ordered) nor account for as legitimately utilized, the Seller shall be liable to pay to the Owner the expenses incurred by Consultant/Owner in procuring, expediting, inspection, testing, packing, shipping handling, incurring payment of duties and taxes and financing of

purchases as notified by TKIS or Owner regardless of the issue price to Seller, if any, agreed to on the Order.

36.0 ORDER OF PRECEDENCE:

In case of any difference between these conditions of order and special conditions, if any, referred to or incorporated in a particular order, the latter shall prevail.

37.0 ARBITRATION:

All the disputes and differences arising under the contract whether during or after completion of the contract or whether before or after determination, foreclosure or breach of the contract (other than those in respect of which the decision of any person is by the contract expressed to be final and binding) shall after written notice by either party to the contract to the other of them and to appointing authority hereinafter mentioned be referred for adjudication to a sole arbitrator to be appointed as hereinafter provided.

For the purpose of appointing the sole Arbitrator referred to above, CMD NALCO who shall be appointing authority will send within thirty days of receipt of the notice, to the Seller a panel of three names of persons.

The Seller shall on receipt of the names as referred select any one of the person names to be appointed as a sole Arbitrator and communicate his name to the Appointing Authority within thirty days of receipt of the names. The Appointing Authority shall thereupon appoint the said person as the Sole Arbitrator. If the Seller fails to communicate such selection as provided above within the period specified, the Appointing Authority shall make the selection and appoint the selected person as the sole Arbitrator.

If Arbitrator so appointed is unable to/unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever, arbitrator shall be appointed as aforesaid. The work under the contract shall not be stopped during the arbitration proceedings.

The Arbitrator shall normally be deemed to have entered on the reference on the date he issues notices to both the parties fixing the date of the first hearing.

The Arbitrator may, from time to time, with the consent of the parties, enlarge the time for making and publishing the award.

The Arbitrator shall give a separate award in respect of each dispute or difference and shall give a reasoned and speaking award/awards.

The venue of arbitration shall be at Bhubaneswar. However, if the situation so warrants, at marginally & when required be held at the place where the site of work is situated.

The fees, if any, of the Arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The costs of the reference and of the award including the fees, if any, of the Arbitrator shall be in the discretion of the arbitrator who may direct to and by whom and in what manner, such costs or any part thereof shall be paid and may fix or settle the amount of costs to be so paid.

The award of the Arbitrator shall be final and binding on both the parties.

Subject as aforesaid the provisions of the Arbitrator and Conciliation Act 1996 or any statutory modification or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the Arbitrator proceedings under this clause.

For Public Sector Enterprises guidelines as per circular of BPE No. 15.09.86 – BPE (fin) dtd. 30.03.89 as amended from time to time will be applicable for resolving any dispute.

38.0 GOVERNING LAW AND JURISDICTION:

All actions at law or suits arising out of or in connection with this order or the subject matter thereof and whether as to construction or otherwise shall be instituted in a court of competent jurisdiction in the State of Orissa.

39.0 TRANSFER OF PROPERTY:

In the absence of any provision to the contrary, transfer of property in the goods shall be deemed to have taken place as follows:

- (i) F.O.R. or F.O.T. Despatch Point

On handling over the goods to the authorized carrier against a receipt and such receipt having been received by TKIS/Owner.

- (ii) F.O.R. destination station : On taking delivery from the Railway at the Destination Station.

- (iii) Equipment sent freight paid : On arrival under lifting hook at the to the 5TH STREAM ALUMINA job site.

REFINERY EXPANSION

PROJECT SITE

On temporary acceptance by TKIS/Owner at job site.

Transfer of property in the Goods shall be without prejudice to any guarantee or liability of the Seller as to the quality suitability or performance of the Goods.

40.0 PUBLICITY AND ADVERTISING:

Seller shall not without the written permission of Consultant/Owner or any Company affiliated with TKIS/Owner or to the destination or the description of the goods or services supplied to the Owner in any publication, publicity or advertising media.

41.0 VENDOR DATA REQUIREMENTS:

The submission by the Seller to TKIS/Owner of drawings and data documentation is an integral part of the Order. The number of copies (reproducibles and Prints) and time limits for submitting these documents by the Seller are specified on the Order. These requirements must be respected failing which the order will not be deemed to have been duly executed for all purpose.

PRICED SCHEDULE FORMAT for Supply of Equipment / Items (BOQ1)

All Prices should be in INR

Name of Equipment : Supply of Dry Type Transformer alongwith Mandatory Spares, Commissioning Spares, O&M Spares and Site Supervision

RFQ (MR) No: NBC/MM/VFDTX/2023

Bidder Name :

This BOQ template must not be modified/replaced by the bidder and the same should be submitted after filling the highlighted columns, else the bidder is liable to be rejected for this RFQ. Bidders are allowed to enter the Bidder Name and Values only.

Sr. No.	Item Description	Quantity	Units	BASIC Unit Price in Figures to be entered by the Bidder on FOT Dispatch Point basis	Freight Charges in % to be entered by the Bidder Upto Project Site - Damanjodi, Odisha	Total Price in Figures CPT Nalco Project Site - Incoterms 2010 Damanjodi, Odisha
1	Supply of Dry Type Distribution Transformers including Packing & Forwarding, a;; fittings, accessories and associated items including all Mandatory & Commissioning Spares and all Testing and Inspection Charges as per Technical Specification	Not to fill				
1.01	Following transformers complete with all accessories in accordance with this specification (Part-I & Part-II): A) 750 kVA, 6.6 / 0.72 kV, * %Z, VPI type transformer. Quantity 3 nos.	1	Lumpsum			
				Total Charges for rendering Site Supervision Services		

Notes for BOQ1 1. Bidder to Quote Total FOT Dispatch Point Price for all the Dry Type Transformers in Column "Total BASIC Price in Figures to be entered by the Bidder on FOT Dispatch Point basis". (Example - There are 3 Transformers in Sr No. 1.01, Hence if the Unit Rate for each Transformer is Rs 100/- then the Bidder should mention Rs.300/- in Column under heading "Total BASIC Price in Figures to be entered by the Bidder - FOT Dispatch Point basis "). However, Bidder shall furnish the break-up of prices for each Transformer Tag mentioned above, within one (1) month from NALCO's BOA, for review & approval by Nalco.

2. The above prices should be inclusive of Mandatory Spares . However, in line with the ITB, the Bidder should submit the Price Break-up of the Mandatory Spares included by them in the above quoted prices. This price break-up should be submitted in line with the enclosed BOQ2 in separate sealed envelope in hard copy along with Priced Bid. Unpriced Copy of the same shall be submitted along with the Technical Unpriced Bid. Please refer the ITB for details of bid submission modalities.

3. The above prices should be inclusive of Commissioning Spares . However, in line with the ITB, the Bidder should submit the Price Break-up of the Commissioning Spares included by them in the above quoted prices. This price break-up should be submitted in line with the enclosed BOQ3 in separate sealed envelope in hard copy along with Priced Bid. Unpriced Copy of the same shall be submitted along with the Technical Unpriced Bid. Please refer the ITB for details of bid submission modalities.

4. Bidder should submit the itemwise list of One Year O&M Spares as per BOQ4 in separate sealed envelope in hard copy. Unpriced Copy of the same shall be submitted along with the Technical Unpriced Bid. Please refer the ITB for details of bid submission modalities. Bidders shall quote above prices for 1 year O&M Spares on FOT-Site basis. The prices in Form BOQ3 shall not be considered in the evaluation of bids.

5. Above Prices should be exclusive of GST.

PRICED SCHEDULE FORMAT FOR PRICE BREAK-UP OF MANDATORY SPARES (BOQ2)

All Prices should be in INR

Name of Equipment: Supply of Dry Type Transformer alongwith Mandatory Spares, Commissioning Spares, O&M Spares and Site Supervision

RFQ (MR) No: NBC/MM/VFDTX/2023

Bidder Name:

Prices in Figures to be entered by the Bidder on FOT Dispatch Point Basis excluding GST

Sr. No.	Item Description	Quantity	Units	Unit Price	Total Price on FOT Despatch Point Basis.
1	Price Breakup of Mandatory Spares				
1.01	HV bushing complete with metal parts	1	NO		
1.02	LV bushing complete with metal parts	1	NO		
1.03	LV neutral bushing	1	NO		
1.04	Set of gaskets for transformer	1	Set		
1.05	Temperature Scanner / Indicator	1	NO		
1.06	Door Limit Switch	1	NO		

Notes for BOQ2 1.The Break up prices mentioned above are included in the Basic Prices of the equipment quoted in BOQ1.

2. Above Prices should be exclusive of GST.

LIST OF COMMISSIONING SPARES and ALL SPECIAL TOOLS & TACKLES (BOQ3)

Name of Equipment: Supply of Dry Type Transformer alongwith Mandatory Spares, Commissioning Spares, O&M Spares and Site Supervision

RFQ (MR) No: NBC/MM/VFDTX/2023

Bidder Name:

Sr. No.	Item Description	Quantity	Units
1	Commissioning Spares for 3Nos. Of Dry Type Distribution Transformers as per Specification		
1.01			
1.02			
1.03.....onward s (Refer Note below)			

**Notes for
BOQ4:**

1.Bidder to submit the Groupwise list for Commissioning spares in above form. Bidder to note Sr.Nos. 1.01, 1.02 ...etc are indicated for illustrative purpose only. Bidder to list the number of Commissioning spares considered in the Bid for the group & Bidder shall input the additional Sr. Nos. like 1.01, 1.02, 1.03..... as per the requirement for Transformers or mentioned in **Technical Specifications**.

2.The prices of above items are included in the Basic Prices of the equipment quoted in BOQ1.

PRICED SCHEDULE FORMAT FOR ONE YEAR OPERATION AND MAINTENANCE (O&M) SPARES (BOQ4)

All Prices should be in INR

Name of Equipment: Supply of Dry Type Transformer alongwith Mandatory Spares, Commissioning Spares, O&M Spares and Site RFQ (MR) No: NBC/MM/VFDTX/2023

Bidder Name:

Prices in Figures to be entered by the Bidder on FOT SITE Basis excluding GST

Sr. No.	Item Description	Units	Unit Price on FOT Site Basis
1	ONE YEAR O&M Spares for 3 nos. Dry Type Distributions Transformers		
1.01			
1.02			
1.03.....onwards (Refer Note below)			

Notes for BOQ3:

1. Bidder to submit the Groupwise list for ONE YEAR O&M spares in above form. Bidder to note Sr.Nos. 1.01, 1.02 ...etc are indicated for illustrative purpose only. Bidder to list the number of O&M spares considered in the Bid for the group & Bidder shall input the additional Sr. Nos. like 1.01, 1.02, 1.03..... as per the requirement for the Group of
2. The above prices in Form BOQ4 shall not be considered in the evaluation of bids.
3. Above Prices should be exclusive of GST.

GUARANTEED LOSS FIGURES FOR DISTRIBUTION TRANSFORMERS (BOQ5)

Name of Equipment: Distribution Transformers - Oil Filled for NALCO Alumina 5th Stream Refinery

RFQ (MR) No: NBC/MM/VFDTX/2023

Bidder Name:

Sr. No.	Description	UNIT	Guaranteed Loss Figures for each Transformer
1	Guaranteed Loss Figures for Following transformer complete with all accessories in accordance with this specification (Part-I & Part-II): A) 750 kVA, 6.6 / 0.72 kV, * %Z, VPI type transformer		
1.01	Iron losses	kW	
1.02	Copper losses	kW	

- Notes for BOQ5 :**
1. Bidder to quote the figures only in the table above. No separate tables/conditional figures to be quoted. In case separate table / conditional figures are quoted or if the Bidder does not quote the Guaranteed Loss figures in the above table, the Bidder's offer shall be rejected.
 2. Bidder should quote the guaranteed loss figures for each tag number in Column titled "Guaranteed Loss Figures for each Tranformer" of the above BOQ. This will be multiplied with the total number of tags against respective Sr. Nos. of above BOQ5.
 3. THIS FORM BOQ5 SHOULD NOT BE UPLOADED IN THE CPP PORTAL. THIS FORM SHOULD BE DULY FILLED IN, STAMPED AND SIGNED BY THE BIDDER AND SHOULD BE SUBMITTED IN HARD COPY (ORIGINAL) IN A SEALED ENVELOPE TO THE NALCO CORPORATE OFFICE ON OR BEFORE THE BID SUBMISSION DUE DATE.

SPECIAL PURCHASE CONDITIONS
(SPC)

PROJECT: ALUMINA 5TH STREAM REFINERY

OWNER / PURCHASER: National Aluminium Company Ltd.
(Nalco)

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RFQ (MR) Number: NBC/MM/VFDTX/2023
Date: 20.03.2023
For: Dry Type Transformers

SPECIAL PURCHASE CONDITIONS (SPC)

1. INTRODUCTION

1.1. M/s National Aluminium Company Limited (Nalco) having its Corporate Office at Bhubaneswar, Odisha is a premier Public Sector Undertaking and a Navaratna Company, under the administrative control of Ministry of Mines, Government of India owns and operates a large integrated Mines-Alumina-Aluminium complex in India.

As a part of its growth plan Nalco is planning to set up one more Stream (5th Stream) in its Alumina Refinery at Damanjodi. The stream capacity would be 1.0 MTPA.

At port facilities, Visakhapatnam one Alumina silo of capacity 25000 MT and one Caustic Soda tank of capacity 5000 MT shall be constructed for export of Alumina and import of caustic soda liquor respectively.

1.2. National Aluminium Company Ltd. (Nalco) invites bids against the above RFQ. These Special Purchase Conditions (SPC) are being issued by M/s. National Aluminium Company Ltd (Nalco) i.e. the Owner. These SPC and the documents mentioned in the Annexures to these SPC (along with other documents listed in the RFQ such as Nalco's General Purchase Conditions, Price Schedule Formats, are a part of the above referred RFQ, and may become a part of any Purchase Order that might result from submission of a Bid in response to this RFQ. All Purchase Orders will be issued by Nalco and all payments will be made only by Nalco.

2. PAYMENT TERMS

In partial modification to the payment terms as mentioned in the General Purchase Conditions, the following payment terms shall be applicable.

Interest Bearing Advance

Interest bearing recoverable advance shall be paid to the vendor/supplier, if requested by them, in two installments up to 15% of the Order Value (excluding taxes & duties), i.e. 10% in 1st installment & 5% in 2nd installment after the following conditions have been fulfilled:

- a. Submission of Contract-cum-Performance Bank Guarantee as per Contract terms by vendor/supplier.
- b. Submission of Bank Guarantee(s) for an amount equivalent to 110% of the advance amount, valid up to delivery period plus one-month, from any bank as per list provided by NALCO and in a format acceptable to NALCO.
- c. Second installment of 5% shall be paid on submission of critical drawings as stipulated

in the RFQ documents. If it is found that, the advance has been utilized by the vendor/supplier in whole or part for any other purpose; NALCO may, at its discretion, forthwith recall the entire advance and without prejudice to any other right or remedy available to NALCO, recover the same by recourse to the Bank Guarantee(s).

- d. The vendor/supplier shall, at the request of NALCO, suitably extend the validity of the Bank Guarantee(s) for such period as may be required.
- e. Vendor/supplier may submit multiple Bank Guarantees; each bank guarantee should be not less than 25 % of the advance amount for facilitating release of bank guarantee amount equivalent to advance realized from vendor / supplier invoices.
- f. Recovery of advance paid shall start from 1st Invoice.
- g. Depending upon the percentage of advance opted by the vendor / supplier, the recovery shall be made in such a manner that the total advance is recovered when 80% of the Total Order Value gets paid. The percentage of recovery from invoices for advance shall be decided as per given formula:
$$\% \text{ Recovery} = (\% \text{ Advance} / 80) \times 100$$
- h. The interest rate of such advance shall be variable. For the financial year 2022-23, the interest rate is 8.1% which is worked out based on MCLR rate of SBI as on April'2022 for one year tenor plus 1%. For subsequent financial years, the interest rate for the balance amount of advance will be MCLR (1 year tenor) rate of SBI declared in the month of April of that financial year plus 1%.
- i. No loading shall be done on account of payment of advance.

Payment Terms:

100% payment along with GST shall be payable as per following break up:

(i) Supply

- (a) 85% payment on pro-rata basis for order value against dispatch documents through bank along with 100% GST on order value. The dispatch documents shall include the Vendor's invoice, Packing List, Delivery challan, Lorry Receipt and any other document stipulated in the Purchase Order.
- (b) 5% payment against receipt of final technical documentation/ drawings as per vendor data requirement specified in the technical specifications.
- (c) 10% payment within 30 days of receipt and acceptance of materials at site.

Goods & Services Tax (GST) as applicable shall be payable extra. The vendor will have to raise invoice for the applicable GST amount as per approved format for claiming the GST paid.

NALCO, being Buyer (under Section 194Q inserted in the Income Tax Act, 1961 vide Finance Act 2021) having total sales, gross receipts, or turnover from business above Rupees Ten Crores during the last Financial Year, will deduct TDS under Section 194Q, w.e.f. 01.07.2021, at the prescribed rate of 0.1% on the purchase value of any goods, aggregate of which is exceeding the threshold limit of Rs.50 Lakhs in a Financial year.

Accordingly, Vendors/Sellers are advised not to take any action to collect tax at source under section 206C(1H) of the Act w.e.f. 01.07.2021, in case provisions of section are applicable to you.

The above is as per the current status and is subject to modification(s) based on amendments/ notifications under Income Tax Act, 1961.

Vendors / Contractors categorised/ designated as “specified person” under Section 206AB of Income Tax Act, 1961 shall be liable for TDS at higher rate as provided under the said section, by NALCO. So, vendors/ contractors are advised to submit self-certified copies of Income Tax Return (ITR) for each of the two previous years for which due date for filing of ITR has expired, along with the invoice/ bill so as to facilitate NALCO verify the applicability of Section 206AB.

(ii) Site Work (Erection & Commissioning): (Not applicable to this RFQ)

- (a) 90% pro-rata along with GST thereon against monthly progressive bills duly certified by Engineer-In-Charge (EIC).
- (b) 10% along with GST thereon within 30 days of final handing over of all the DG Sets to NALCO at site after successful commissioning and PGTR of the DG Sets certified by Engineer-In-Charge (EIC).
- (c) TDS shall be deducted as per provision of Income Tax Act.
- (d) Cess under BOCW act (Building and Other Construction Workers act 1996) shall be borne by the vendor/supplier.

Goods & Services Tax (GST) as applicable shall be payable extra. The vendor will have to raise invoice for the applicable GST amount as per approved format for claiming the GST paid.

Note: **Final Handing Over** shall mean commissioning including acceptance of performance guarantee tests. However, in case PG Tests could not be conducted within 6 months from commissioning, for reasons not attributable to vendor, last 10% will be released against a bank guarantee of equal amount along with applicable GST valid for one year initially and extendable thereafter until final handing over.

Contract Performance Bank Guarantee:

The Vendor / supplier shall furnish a Contract Performance Bank Guarantee (CPBG), for 3 % of the Total Order Value as per NALCO's format, executed by any of the banks listed in the Appendix enclosed with the ITB. The Vendor shall submit the CPBG within 21 days of issue of LOA / FOA / BOA by NALCO. **This CPBG shall be valid for a period of three months beyond expiry of the contractual Guarantee period of 12 (twelve) months from successful commissioning or 30 months from the date of last dispatch, whichever is earlier.**

Each page of the Bank Guarantee must be stamped & signed by the authorized signatory(ies) of the Bank. Corrections, if any, must also be initialed by the authorized signatory(ies) of the Bank. The Bank is required to send the CPBG directly to OWNER and for BG confirmation, the issuing bank can adopt SFMS facility in favour of Nalco's Payee bank.

General Notes:

1. For all Indian Vendors, the CGST & SGST or IGST shall be released only on receipt of tax compliant GST Invoice / document, against which Nalco shall be able to take the Input Tax Credit (ITC) in terms of GST provisions.
2. All Bank guarantees will be issued directly to Nalco – Bhubaneswar by the Bank and Vendor shall enclose copy of the same along with invoice. Banks shall be informed to send a separate confirmation immediately on request Nalco to expedite processing at Nalco's end.
3. Billing schedule (wherever applicable as per PO) shall be submitted to Nalco by the vendor for approval within 45 days from the date of Brief Order of Acceptance / Purchase Order (whichever is issued earlier) wherever specified in the Purchase Order. No partial dispatch or pro-rata payment shall be made without the approval of billing schedule.
4. Nalco shall establish the Letter of Credit only on receipt of Vendor's acceptance to Nalco's Brief Order of Acceptance (BOA) and on submission of 3% PBG (plus applicable GST) by Vendor to Nalco within 21 days of BOA. (Not applicable for this RFQ)
5. All Bank Guarantees shall be sent to the following address:
Deputy General Manager (Finance)
National Aluminium Company Limited
Nalco Corporate Office,
P/1, Nayapalli, Bhubaneswar – 751 013
Odisha, India.
Mobile- 9437025102
 - (i) **Ocean Freight / Air Freight (Foreign Bidder)** (Not applicable for this RFQ)
Ocean transportation from FOB Major International Gateway Seaport of Exit (Incoterms 2010) to Kolkata/ Vishakapatnam seaport (India) shall be arranged by Nalco (for FOB Orders) through their nominated freight forwarder. Bidder shall arrange handing over the material to Nalco's designated freight forwarder at the designated port of exit.
 - (ii) The request for ocean freight up to Kolkata/ Vishakapatnam seaport of entry is for comparison of bids and will not in any way, limit Nalco's right to contract on different terms.
 - (iii) Nalco reserves the right to place the order on any of the specified price basis (FOB

or CFR). In case of award, initially the Brief Order of Acceptance (BOA) shall be placed on FOB basis. Nalco reserves the right to convert the same to CFR basis at a later date.

- (iv) Therefore, bidder's quoted ocean freight charges should be firm and fixed and shall remain valid for the entire duration of contract irrespective of the mode of ordering by Nalco or the destination port in India.
 - (v) The Bidder shall not be allowed to change port of Shipment after quoting, without the prior specific approval of Nalco.
 - (vi) Where the materials are being despatched by air, the vendor shall quote on FCA Basis (Incoterms 2010) and shall also quote separately the Firm Air Freight charges up to Kolkata Airport . Nalco reserves the right to place the Purchase Order initially on FCA basis and then later on convert to CPT Basis, at their option.
 - (vii) The vendor shall furnish the details of consignment such as outside dimensions, weights (both gross and net), number of packages, type and number of containers required, technical description and drawings, name of the supplier, port of loading etc. to enable Nalco to arrange the shipment. In case of ODC consignments (over dimensional consignments), the vendor shall inform Nalco and their freight forwarder the expected date of shipment well in advance (at least four weeks in advance) and obtain Nalco's specific intimation about the destination port in India. The vendor shall adhere to all instructions of Nalco in this regard. The vendor's quoted ocean freight charges shall remain firm and fixed and shall not be subject to any escalation for any reason whatsoever. The vendor shall furnish the cargo details to Nalco and Nalco's freight forwarder within three months from the date of Nalco's Brief Order of Acceptance (for package units), and within one month from the date of Nalco's Brief Order of Acceptance (for all other items). The actual cargo shipped should not exceed the cargo details furnished in terms of volume, weight and no. of containers. In case the actual cargo dispatched exceeds the cargo details furnished, the extra freight incurred by Owner will be to Seller's account. In case the order is converted to CFR basis, the free time for detention of the containers should not be less than 14 days.
 - (viii) "Order Value" or "Total Order Value" means total contract value exclusive of taxes and duties in India.
 - (ix) For all Purchase Orders placed on Indian vendors, the E-Way bill shall be the responsibility of the vendor. For all Purchase Orders placed on Indian vendors, the vendor shall quote the Firm freight charges up to Nalco's Site at Damanjodi / Visakhapatnam (as applicable). If any route survey is to be carried out for any consignment, then the vendor shall carry out the same at his own cost only.
6. Bidder to note wherever there is a requirement of equipment / item pertaining to the Vizag Port facilities of NALCO as mentioned in ITB, separate order will be placed on the successful Bidder and accordingly the successful Bidder needs to raise the separate invoice for enabling Purchaser to claim the ITC (Input Tax Credit)
7. All the materials to be supplied by the vendor to NALCO against the order which will be handed over to NALCO upon completion of the package will be covered under the MCE

policy taken by NALCO. However, the vendor will take insurance for his materials and his personnel used for execution of the work.

For materials to be supplied under NALCO's Insurance policy, the vendor has to give a prior intimation on the following to the insurance company in the e-mail ID amaresh.rout@orientalinsurance.co.in with a copy to storesref_osrd@nalcoindia.co.in:

- (i) Copy of Invoice
- (ii) Vehicle details
- (iii) LR number

3. DELETED

4. TAXES AND DUTIES IN INDIA

The taxes & duties shall as per the payment terms mentioned in this document / Purchase Order. The following provisions of GST shall be applicable:

4.1. GOODS & SERVICES TAX

- 4.1.1. Rate variation in Taxes and any new promulgated taxes after last date of the submission of price bid only on the goods and/or services applicable to invoices raised on NALCO within the contractual delivery date / contractual completion period (including extension approved if any) shall be on NALCO's Account against submission of documentary evidence.
- 4.1.2. Further, in case of delay in delivery of goods and/or services, any upward rate variation in Taxes and any new promulgated taxes imposed after the contractual delivery date / contractual completion period shall be to the Vendor's Account.
- 4.1.3. It would be the responsibility of the Vendor to get the registration with the respective Tax authorities under provision of GST. Any taxes being charged by the Vendors would be claimed by issuing proper TAX Invoice in a GSTN (Goods & Services Tax Network) acceptable format indicating details elements of all taxes charged and necessary requirements as prescribed under the respective tax laws and also to mention his correct and valid GSTN number (GSTIN) along with NALCO's GSTN number as applicable for particular supply on all invoices raised on NALCO under GST Regime.
- 4.1.4. The Vendor would be liable to reimburse or make good of any loss/claim by NALCO towards tax credit rejected / disallowed by any tax authorities due to non-deposit of taxes or non updation of the data in GSTIN network or non-filing of returns or non-compliance of tax laws by the Vendor by issuance of suitable credit note to NALCO. In case, contractor does not issue credit note to NALCO, NALCO would be constrained to recover the amount including interest payable along with Statutory levy/Tax, if any, payable on such recovery.
- 4.1.5. Tax element on any Debit Note / Supplementary invoice, raised by the Vendor will be reimbursed by NALCO as long as the same is within the permissible time

limit as per the respective taxation laws and also permissible under the Purchase Order terms and conditions. Vendors to ensure that such debit Notes are uploaded while filing the Statutory returns as may be prescribed from time to time.

- 4.1.6. The Vendor will be under obligation for quoting/charging correct rate of tax as prescribed under the respective Tax Laws. Further the Vendor shall avail and pass on benefits of all exemptions/concessions/benefits/waiver or any other benefits of similar nature or kind available under the Tax Laws. In no case, differential Tax Claims due to wrong classification of goods and/or services or understanding of law or rules or regulations or any other reasons of similar nature shall be entertained by NALCO.
- 4.1.7. In case NALCO's Input Tax Credit (ITC) is rejected on account of wrong levy of tax i.e. payment of Integrated Tax in place of Central Tax+ State/Union Territory Tax or vice versa, the Vendor is liable to make good the loss suffered by NALCO by issuance of suitable credit note to NALCO. In case Vendor does not issue credit note to NALCO, NALCO would be constrained to recover the amount including interest payable along with Statutory levy, if any, payable on such recovery.
- 4.1.8. NALCO shall reimburse GST levied as per invoice issued by the Vendor as prescribed under section 46 of the CGST Rules 2017 and respective states Act and Rules.
- 4.1.9. To enable NALCO to avail ITC, the Vendor shall furnish/submit any and all certificates, documents and declarations as are required by NALCO to avail of the ITC with respect to GST reimbursed by NALCO on materials sold to NALCO.
- 4.1.10. The HSN / SAC Code under which the goods/service will fall should be clearly mentioned along with the Rate at the time of submission of invoice for releasing payment.
- 4.1.11. In case, NALCO is not able to take Input Tax Credit due to any noncompliance/default/negligence of the Contractor, the same shall be recovered from the pending bills/dues (including any security available with NALCO).
- 4.1.12. Vendor shall be responsible to indemnify NALCO for any loss, direct or implied, accrued to NALCO on account of Vendor's failure to discharge his statutory liabilities like paying taxes on time, filing appropriate returns within the prescribed time etc.
- 4.1.13. Any benefit by way of reduction in rate of tax or increase in input tax credit arising due to introduction of GST shall be passed on to NALCO through reduction in supply value by way of commensurate reduction in Bill value.
- 4.1.14. The Vendor shall ensure that all the required documents as per the GST regulations are furnished to NALCO with their invoices failing which NALCO shall not make any reimbursement of such GST.

4.1.15. The applicable GST for site supervision training services by Foreign Service Provider shall be borne by NALCO on reverse charge basis.

4.1.16. Nalco's GST numbers are as follows:

Damanjodi Refinery: 21AAACN7449M1Z9

Vizag: 37AAACN7449M1ZW

4.2. DEDUCTION OF INCOME TAX AND TAX DEDUCTION AT SOURCE (TDS) UNDER GST

4.2.1. Income Tax as applicable at the prevailing rate on the gross amount billed shall be deducted from the Vendor's bills (wherever such deduction is applicable).

4.2.2. As per section 51 of CGST Act 2017, to read with Notification No. 33/2017-Central Tax, dated 15.09.2017, NALCO shall deduct at source @ 1% CGST & @ 1% SGST for intra state transactions and @2% IGST in the case of interstate transactions from the payment made and credited to the supplier of taxable goods and/or services, provided if the contract value is more than Rs.2,50,000/- . This deduction is applicable from the date to be notified by the Government. The value of supply shall be taken as the amount excluding CGST, SGST, UGST and Cess indicated in the invoice.

4.3. INCOME TAX

4.3.1. The Vendor shall be exclusively responsible and liable to pay taxes on income comprised in all or any payments arising out of the Purchase Order, whether payable/paid in India or in any other jurisdiction and quoted prices shall be inclusive of Income Tax.

4.3.2. Income tax (if applicable) shall be deductible at source by NALCO on all payments to be made to the Vendor. However, for payments (for services) made to Foreign Bidders in Foreign Currency, the applicable Withholding Tax shall be borne by NALCO on grossing up basis. As per extant provisions of Income Tax Act and Rules made there under following documents are mandatory for this purpose (a) Tax Residency Certificate (TRC) issued by the competent authority of the country of residence of the Vendor (b) Form 10F as described in Income Tax Rules, 1962 and (c) Permanent Account Number (PAN) or a declaration in specified format in lieu of Permanent Account Number (PAN).

4.3.3. The Indian Income Tax Act and rules made there under contains provisions permitting deduction of tax at a lesser rate if the Vendor is able to justify to the Income Tax Authorities such lesser rate of deduction. However, a deduction once made has to be deposited by the OWNER with the Income Tax

Authorities in India and will not be adjustable by the OWNER. It is therefore in the interest of the Vendor that prior to release of any payment due to the Vendor under the Purchase Order, the Vendor obtains, from the relevant Income Tax Authorities in India, a certificate specifying the rate of deduction/withholding of Income tax at source, failing which, payment to the Vendor shall be made by the Nalco after Withholding/deduction at the highest rate as may be applicable to the non-resident contractors as per Provisions of Income Tax Act, 1961.

4.4. RENT & ROYALTIES

4.4.1. Unless otherwise specified, the VENDOR shall pay all tonnage and other royalties, rents and other payments or compensation (if any) for getting Stone, sand, gravel, clay, bricks and other materials required for the works or any temporary works and it shall be deemed to have been included in the quoted prices.

4.4.2. VENDOR to also note that as per Mines and Minerals Act of Govt. of Orissa the contractor is required to pay royalty for various types of construction materials (minor minerals) used in the work. The royalty charges shall have to be deposited in the office of Tahsildar from whose jurisdiction the minerals have been lifted. The party has to submit Mineral usage statement and Royalty Clearance certificate from above Authority along with all their RA Bills. No bills will be processed for payment without payment of all statutory dues by the VENDOR.

4.5. BUILDING AND OTHER CONSTRUCTION WORKER'S WELFARE CESS (BOCW)

BOCW, if applicable, shall be borne by the VENDOR. The Owner shall not bear any liability in respect of the same.

4.6. NEW TAX AND STATUTORY VARIATION IN TAXES AND DUTIES

4.6.1 If any new taxes or duties (including any increase in rate of any existing taxes or duties) are levied in India after the date of submission of bids/ revised price bids (whichever is later) and within the Contractual delivery / completion period or any extension thereof by NALCO, on any payments due to the Vendor under the Purchase Order, other than tax on income, wealth or profits of the Vendor, the OWNER shall reimburse the Vendor the amount of such taxes or duties lawfully paid and borne by the Vendor against proof of payment.

4.6.2 If there is any increase in taxes or duties or if any new taxes or duties are levied in India after the contractual delivery / completion period, such increase in taxes or duties or such new taxes or duties shall be to the Vendor's account only

5 DELAYED COMPLETION (PRICE REDUCTION SCHEDULE)

5.1 The clauses related to delayed deliveries shall be as mentioned in Nalco's General Purchase Conditions. **Price reduction schedule for delayed delivery shall be ½ % of delayed order value, per week of delay or part thereof, subject to a maximum of 5% of total order value. The date of Last LR shall be considered as the date of delivery for the purpose of LD/PRS.**

5.2 Non- acceptance or deviation to Price Reduction Schedule (PRS) clause is a rejection criteria.

5.3 For the purpose of calculating the PRS for delayed delivery, the contractual delivery date shall be the date of last Lorry Receipt (for Indian Vendors), and the date of last Bill of Lading or Air Way Bill (as applicable) -for foreign vendors.

6 SHIPPING WEIGHT

Actual weight/ volume shall not exceed the estimated weight/ volume by bidder. In case actual weight/ volume exceeds, additional cost of shipping on this account shall be borne by the bidder. Freight quoted by Bidder shall be firm. Bidder shall intimate in advance to the Owner, Consultant & Owner's authorised Freight Forwarder / Logistic Contractor, prior despatch of equipment/item from their works.

7 VENDOR'S/SUPPLIER'S DEFAULT

Any forfeiture / recovery made by the NALCO due to any of "vendor's/supplier's default" shall be with applicable GST at the time of settlement.

8 ANTI PROFITEERING PROVISIONS

Anti-profiteering provisions mandates that any reduction in tax rates or benefits of input tax credits be passed on to the consumer by way of commensurate reduction in prices. Bidders) to take note of the same and pass on such benefits to NALCO while quoting their price as well as during execution of the Contract. The Contractor shall submit a certificate under Section 171 of CGST Act, before or at the time of submitting the final bill to the effect that anti profiteering measure has been complied with. The certificate should contain the clause "Commensurate benefit of reduction in rate of tax or benefit of input tax credit in the Order/ Contract No. dtd. has been passed on to NALCO.

9 ARBITRATION & DISPUTES

Arbitration & Disputes, if any, will be dealt as per the procedures laid down in the enclosed ANNEXURE 2 to this document.

10 INDIRECT OR CONSEQUENTIAL LOSS

Neither party shall be liable to the other for any and all consequential, special, speculative, indirect and incidental damages including but not limited to loss of use, loss of profits or product, for extra cost of producing product, for extra cost of capital, or for failure to achieve or delay in achieving anticipated profits or products.

11 LIMITATION OF LIABILITY

The maximum liability of the "Supplier/Vendor/ Seller/Contractor" shall be up to 100% of the Total Order Value. The maximum liability shall be exclusive of patent infringement & indemnity.

12 PROVIDENT FUND

12.1 The CONTRACTOR shall strictly comply with the provisions of Employees Provident Fund Act and register the establishment with the concerned Regional Provident Fund commissioner before commencing the work. The CONTRACTOR shall deposit "Employees" and "Employers" contributions in the designated account with the designated Authority every month. The CONTRACTOR shall furnish along with each running bill, the challan/receipt for the payment of provident fund made to the RPFC for the preceding month(s).

12.2 In case the Provident Fund Authority's receipted challan referred to above is not furnished, the OWNER shall deduct 5% (five percent) (or such amount as the OWNER may decide) of the payable amount from the CONTRACTOR'S running bill and retain the same as a security for the payment of the Provident Fund. Such retained amounts shall be refunded to the CONTRACTOR only on production of challan / receipt of the Provident Fund Authority for the period covered by the related deduction. The Contractor shall also be adhere to all the provisions of the Employees State Insurance Act, and shall be responsible for the Provident Fund and ESIC Coverage of its personnel and its sub-contractor's personnel.

13 CONTRACTOR TO COVER INSURANCE:

Contractor shall at his own expense carry and maintain insurance with reputed insurance companies to the satisfaction of the Owner as follows:

13.1 Employees State Insurance Act:

The contractor agrees to and does hereby accept full and exclusive liability for compliance with all obligations imposed by the Employees State Insurance Act., 1948, and the contractor further agrees to defend, indemnify and hold Owner harmless from any liability of penalty which may be imposed by the Central, State or Local authority by the reason of any asserted violation by contractor or Sub-contractor of the Employee's State Insurance Act, 1948 and also from all claims, suits or proceeding that may be brought against the Owner arising under, growing out of or by reasons of the work provided for by this contract whether brought by employees of the contractor, by third parties or by Central or State Government authority or any political sub-division thereof.

The contractor agrees to fill in with the Employees State Insurance Corporation, the Declaration Forms and all forms which may be required in respect of the contractor's or sub-contractor's employees, who have to be covered under ESIC as per applicable laws and who are employed in the work provided for or those covered by ESI from time to time under the Agreement. The contractor shall deduct and secure the agreement of the subcontractor to deduct the employee's contribution as per the first schedule of the Employee's State Insurance Act from wages and affix the employee's contribution cards at wages payments intervals. The contractor shall remit and secure the agreement of the sub-contractor to

remit to the State Bank of India, Employees State Insurance Corporation Account, the employee's contribution as required by the Act. The contractor agrees to maintain all cards and records as required under the Act in respect of employees and payments and the contractor shall secure the agreement of the sub-contractor to maintain such records. Any expenses incurred for the contributions, making contributions or maintaining records shall be to the contractor's or sub-contractor's account.

The Owner shall retain such sum as may be necessary from the total contract value until the contractor shall furnish satisfactory proof that all contribution as required by the Employees State Insurance Act, 1984, have been paid. This will be pending on the contractor when the Employees State Insurance Act is extended to the place of work.

13.2 Workmen Compensation and Employees Liability Insurance:

Insurance shall be effected for all the contractor's employees engaged in the performance of this contract. If any of the work is subject, the contractor shall require the sub-contractor to provide workmen's compensation and employer's liability insurance for the latter's employees if such employees are not covered under the contractor insurance.

13.3 Any other insurance required under Law or Regulations or by Owner:

Contractor shall also carry and maintain any and all other insurance, which he may be required under any law or regulation from time to time. He shall also carry and maintain any other insurance, which may be required by the Owner.

13.4 Accident or Injury to workmen:

The owner shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the Employment of the contractor or any sub-contractor save and except and accident or injury resulting from any act or default of the Owner, his agents or servants and the contractor shall indemnify and keep indemnified the Owner against all such damages and compensation (save and except as aforesaid) and against all claims, demands, proceeding, costs, charges and expenses, whatsoever in respect or in relation thereto.

ANNEXURE 1 TO SPC
PRICE REDUCTION CLAUSE FOR NOT MEETING GUARANTEED PERFORMANCE
PARAMETERS

Price Reduction Clause for not meeting Guaranteed Performance Parameters is Not Applicable for this RFQ (MR).

ANNEXURE 2 TO SPC

ARBITRATION

SETTLEMENT OF DISPUTES & ARBITRATION

1. In the event of any question, dispute and/or difference whatsoever arising under this assignment in connection therewith including any question relating to existence, meaning and interpretation of this assignment or any alleged breach thereof, the same will be settled as far as possible by mutual discussions of the parties.
2. Notwithstanding any such claim under arbitration, the CONTRACTOR shall continue to perform the services unless it is the subject matter of the dispute of referred to arbitration.
3. All disputes or differences whatsoever which shall at any time arise between the parties hereto touching or concerning this contract or the execution or maintenance thereof of the contract or the rights touching or concerning the works or the execution or maintenance thereof of this contract or the construction meaning operation or effect thereof or to the rights or liabilities of the parties or arising out of or in relation thereto whether during or after completion of the contract or whether before or after determination, before closure or breach of the contract (other than those in respect of which the decision of any person is by the contract expressed to be final and binding) shall after written notice by either party to the contract to the other of them and to the Appointing Authority hereinafter mentioned be referred for adjudication to a sole Arbitrator to be appointed as hereinafter provided.

For the purpose of appointing the sole Arbitrator referred to above, the Appointing Authority i.e. Chairman cum Managing Director, NALCO, will send within thirty days of receipt of the notice, to the seller a panel of three names of persons.

The seller shall on receipt of the names as referred select any one of the person names to be appointed as a sole Arbitrator and communicate his name to the Appointing Authority within thirty days of receipt of the names. The appointing Authority shall there upon without any delay appoint the said person as the sole Arbitrator. If the seller fails to communicate such selection as provided above within the period specified, the Appointing Authority shall make the selection and appoint the selected person as the sole Arbitrator.

If the Arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacate his office due to any reason whatsoever sole Arbitrators shall be appointed as aforesaid. The work under the contract shall, however continue during the arbitration proceedings.

The Arbitrator shall be deemed to have entered on the reference on the date he issues notices to both the parties fixing the date of the first hearing.

The Arbitrator shall give a separate award in respect of each dispute or difference and shall give a reasoned and speaking award/ awards.

The seat of arbitration shall be at Bhubaneswar. However, if the situation so warrants venue of arbitration may be at as and where required basis, and may be held at the place where the site of work is situated.

The fees, if any, of the Arbitrator shall, if required to be paid before the award is made and published be paid half and half by each of the parties. The costs of the reference and of the award including the fees, if any of the Arbitrator shall be in the discretion of the Arbitrator who may direct to and by whom and in what manner, such costs or any part thereof shall be paid may fix or settle the amount of costs to be so paid.

The award of the arbitrator shall be final and binding on both the parties.

Subject to aforesaid, the provisions of the Arbitration and Conciliation Act, 1996 as amended by the Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modification or re-enactment thereof and the rules made there under, and for the time being in force shall apply to the arbitration proceeding under this clause.

In the event of disputes or differences arising between one public sector enterprise and a Govt. Department or between two public sector enterprises the above stipulations shall not apply, the provisions DPE office memorandum No.4(1)/2013-DPE(PMA)/FTS-1835 dated 11th April, 2017 or its amendments for arbitration shall be applicable.

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