

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Framework Agreement for Supply of Permanently Colour Coated Metal Sheet Decking Plate, Permanently Colour Coated Metal Cladding Sheet and Factory made Prefabricated Sandwiched Permanently Colour Coated Metal Cladding Sheet for the following project sites:

- 2X800 MW NTPC Lara Super Thermal Power Station
- 2X800 MW NTPC Singrauli Super Thermal Power Plant, Stage-III
- 1X800 MW NTPC Sipat Super Thermal Power Plant, Stage-III
- 2X800 MW DVC Koderma Super Thermal Power Plant



TECHNICAL CONDITIONS OF CONTRACT (TCC)

CONTENTS

Sl. No	DESCRIPTION	Chapter
Volume-IA	Part-I: Contract specific details	
1	Project Information	Chapter-I
2	Scope of Works	Chapter-II
3	Time Schedule	Chapter-III
4	Terms of Payment	Chapter-IV
5	Taxes and other Duties	Chapter-V
6	BOQ Cum Rate Schedule for Each Item	Chapter-VI
7	Annexures	Chapter-VII

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter - I: PROJECT INFORMATION

1.1	INTRODUCTION:
1.1.1	<p>BHEL is intended to finalize a Framework Agreement for “Supply of Permanently Colour Coated Metal Sheet Decking Plate, Permanently Colour Coated Metal Cladding Sheet and Factory made Prefabricated Sandwiched Permanently Colour Coated Metal Cladding Sheet” as per Technical Specification of tender for various BHEL project sites.</p> <p>The project sites are envisaged are as follows:</p> <ol style="list-style-type: none">1. 2X800 MW NTPC Lara Super Thermal Power Station2. 2X800 MW NTPC Singrauli Super Thermal Power Plant, Stage-III3. 1X800 MW NTPC Sipat Super Thermal Power Plant, Stage-III4. 2X800 MW DVC Koderma Super Thermal Power Plant <p>However, the above supplies may also be utilized in any other project site under execution by BHEL or may be executed by BHEL within India, in near future within the original & extended Framework Agreement period.</p>
1.1.2	<p>The information given herein is for general guidance and shall not be contractually binding on BHEL/Owner. All relevant site data /information as may be necessary shall have to be obtained /collected by the Bidder.</p>

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORKS

2.0	Scope of Works:										
2.1	Framework Agreement for Supply of Permanently Colour Coated Metal Sheet Decking Plate, Permanently Colour Coated Metal Cladding Sheet and Factory made Prefabricated Sandwiched Permanently Colour Coated Metal Cladding Sheet as per BOQ Cum Rate Schedule for the following project sites. 1. 2X800 MW NTPC Lara Super Thermal Power Station 2. 2X800 MW NTPC Singrauli Super Thermal Power Plant, Stage-III 3. 1X800 MW NTPC Sipat Super Thermal Power Plant, Stage-III 4. 2X800 MW DVC Koderma Super Thermal Power Plant										
2.1.1	Metal Deck Sheet:										
	<table><tr><th>Item No.</th><th>Item Description</th><th>Unit</th><th>Quantity</th></tr><tr><td>A1502</td><td>METAL DECK SHEET Type-I, supplying permanently colour coated galvanised MS troughed metal sheet decking plate of approved colour over roof purlins for cast-in-situ roof slab as per relevant IS code and Grade as per specification. Bare metal thickness(BMT) of deck plate shall be minimum 0.8mm with minimum trough depth of 44mm (or as per design whoever is higher) of grade G250 as per AS1397/grade SS255 as per ASTM A653M/ grade S250GD as per EN 10326 with zinc coating to class Z275 and shall serve as permanent shuttering to the roof slab 40mm - 100mm thick measured over crest of metal decking & shall have adequate strength to support weight of green concrete and imposed loads of min 100 kg/sqm (for two span condition) during construction between beams as per manufacturer's recommendations/ calculations/ test certificates for approval including fixing of plates to beams, side lapping, end lapping etc. all complete for below mentioned spans. The sheet shall be permanently coated with silicon modified polyester (SMP silicon content 30%-50%) paint or super polyester paint of minimum 20-micron DFT on exposed surface (facing operating floor) over primer coat of minimum 5-micron(nominal) and minimum 10-micron (nominal) SMP or super polyester paint over primer coat of minimum 5 micron (nominal) on other face. SMP and polyester paint system shall be of industrial finish of product type 4 of AS/NZ2728</td><td></td><td></td></tr></table>	Item No.	Item Description	Unit	Quantity	A1502	METAL DECK SHEET Type-I, supplying permanently colour coated galvanised MS troughed metal sheet decking plate of approved colour over roof purlins for cast-in-situ roof slab as per relevant IS code and Grade as per specification. Bare metal thickness(BMT) of deck plate shall be minimum 0.8mm with minimum trough depth of 44mm (or as per design whoever is higher) of grade G250 as per AS1397/grade SS255 as per ASTM A653M/ grade S250GD as per EN 10326 with zinc coating to class Z275 and shall serve as permanent shuttering to the roof slab 40mm - 100mm thick measured over crest of metal decking & shall have adequate strength to support weight of green concrete and imposed loads of min 100 kg/sqm (for two span condition) during construction between beams as per manufacturer's recommendations/ calculations/ test certificates for approval including fixing of plates to beams, side lapping, end lapping etc. all complete for below mentioned spans. The sheet shall be permanently coated with silicon modified polyester (SMP silicon content 30%-50%) paint or super polyester paint of minimum 20-micron DFT on exposed surface (facing operating floor) over primer coat of minimum 5-micron(nominal) and minimum 10-micron (nominal) SMP or super polyester paint over primer coat of minimum 5 micron (nominal) on other face. SMP and polyester paint system shall be of industrial finish of product type 4 of AS/NZ2728				
Item No.	Item Description	Unit	Quantity								
A1502	METAL DECK SHEET Type-I, supplying permanently colour coated galvanised MS troughed metal sheet decking plate of approved colour over roof purlins for cast-in-situ roof slab as per relevant IS code and Grade as per specification. Bare metal thickness(BMT) of deck plate shall be minimum 0.8mm with minimum trough depth of 44mm (or as per design whoever is higher) of grade G250 as per AS1397/grade SS255 as per ASTM A653M/ grade S250GD as per EN 10326 with zinc coating to class Z275 and shall serve as permanent shuttering to the roof slab 40mm - 100mm thick measured over crest of metal decking & shall have adequate strength to support weight of green concrete and imposed loads of min 100 kg/sqm (for two span condition) during construction between beams as per manufacturer's recommendations/ calculations/ test certificates for approval including fixing of plates to beams, side lapping, end lapping etc. all complete for below mentioned spans. The sheet shall be permanently coated with silicon modified polyester (SMP silicon content 30%-50%) paint or super polyester paint of minimum 20-micron DFT on exposed surface (facing operating floor) over primer coat of minimum 5-micron(nominal) and minimum 10-micron (nominal) SMP or super polyester paint over primer coat of minimum 5 micron (nominal) on other face. SMP and polyester paint system shall be of industrial finish of product type 4 of AS/NZ2728										

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORKS

	a	Span up to 1800mm	MT	282.5
	B1502	METAL DECK SHEET Type-II, supplying permanently colour coated galvanised MS troughed metal sheet decking plate of approved colour over roof purlins for cast-in-situ roof slab as per relevant IS code and Grade as per specification. Bare metal thickness (BMT) of deck plate shall be minimum 0.8mm with minimum trough depth of 44 mm (or as per design whoever is higher) of grade G250 as per AS1397/grade SS255 as per ASTM A653M/ grade S250GD as per EN 10326 with zinc coating to class Z275 and shall serve as permanent shuttering to the floor slab 150 mm thick measured over crest of metal decking & shall have adequate strength to support weight of green concrete and imposed loads of min 100 kg/sqm (for two span condition) during construction between beams as per manufacturer's recommendations/ calculations/ test certificates for approval including fixing of plates to beams, side lapping, end lapping etc. all complete for below mentioned spans. The sheet shall be permanently coated with silicon modified polyester (SMP silicon content 30%-50%) paint or super polyester paint of minimum 20-micron DFT on exposed surface (facing operating floor) over primer coat of minimum 5-micron(nominal) and minimum 10-micron (nominal) SMP or super polyester paint over primer coat of minimum 5 micron (nominal) on other face. SMP and polyester paint system shall be of industrial finish of product type 4 of AS/NZ2728.		
	a	Span up to 1800mm	MT	1125.4
	b	Span exceeding 1800mm and up to 2500 mm	MT	232.4
2.1.2	Metal Cladding Sheet:			
	Item No.	Item Description	Unit	Quantity
	A1505	Supplying External/ Inner sheet of Permanent colour coated metal cladding with troughed M.S. sheets of minimum 0.5 mm bare metal thickness of min. grade G350 as per AS1397/grade SS340 class 4 or as per ASTM A792M/ grade S350 GD as per EN 10326 with zinc coating to class Z275 / aluminium zinc alloy coating to class AZ150 on both sides. The	MT	1797.1

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORKS

		exposed face the sheet shall be permanently coated with silicon modified polyester (SMP silicon content 30%-50%) paint or super polyester paint of minimum 20-micron DFT on exposed surface over primer coat of minimum 5 micron and minimum 10-micron SMP or super polyester paint over primer coat of minimum 5 micron on other face. SMP and polyester paint system shall be of industrial finish of product type 4 of AS/NZ2728.		
2.1.3	Factory made Prefabricated Sandwiched Metal Cladding Sheet:			
	Item No.	Item Description	Unit	Quantity
	A1519	Supplying Factory made (Continuous Line) prefabricated sandwiched Permanent colour coated metal cladding comprising top sheets as troughed (minimum depth of trough shall be 30 mm) permanently colour coated sheet & bottom sheet as plain permanently colour coated for covering of exposed metal/concrete / brick surfaces with insulation shall be of Polyurethane type of minimum 50mm thick (excluding trough). The polyurethane shall be Chlorofluorocarbon (CFC) free and self-extinguishing and shall conform to IS 12436: 1988. It shall have Modular Density 40 +/- 2 Kg/m ³ and Thermal Conductivity @ 10 Deg.C 0.017 - 0.020 W/M Ok, Water absorption (% by vol) 3.1, Critical Oxygen Index 23 and Compressive Strength 1.2 Kg/sq.cm, sandwiched between the two sheets, each sheet shall be high strength tensile steel sheet 0.5mm bare metal thickness (minimum) of YS350 as per IS 15961 /grade G350 as per AS1397 / grade SS340 class 4 as per ASTM A792M / grade S350GD as per EN 10326 with zinc coating to class Z 275 / aluminium-zinc alloy coating to class AZ150 on both sides, both sheet shall be permanently coated with silicon modified polyester (SMP with silicon content of 30% to 50%) paint of minimum 20 micron DFT on exposed surface on 5 microns (min.) epoxy primer/phosphate primer coat and 10 micron (min.) SMP on 5 micron (min.) epoxy primer/phosphate primer on other face, SMP paint system shall be of industrial finish of product type 4 of AS/NZS 2728, troughed sheet shall be of approved profile, sectional properties, (suitable for the specified loading / deflection and purlins / runner spacing), colour and shade. Coated surface shall be provided with a protected guard film	MT	467.2

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORKS

		(polyethylene) of about 40 microns to avoid any damage to the coating during handling. Overlap shall be min. 100 mm or as specified by manufacturer.		
2.1.4	Modality of Award:			
2.1.4.1	The scope consists of Three (03) Items viz. Item-1: Metal Deck Sheet (Sl. No. 2.1.1), Item-2: Metal Cladding Sheet (Sl. No. 2.1.2) and Item-3: Factory made Prefabricated Sandwiched Metal Cladding Sheet (Sl. No. 2.1.3)			
2.1.4.2	Bidders to quote total price on F.O.R. Basis (excluding GST) for Item-1, Item-2 and Item-3 separately. Bidder may quote for each item or any combination of items. Bidder to declare the same as per Annexure-1 in their techno-commercial (Part-I) offer.			
2.1.4.3	Price bids of qualified bidders shall be evaluated separately for Item-1, Item-2 and Item-3 and based on their order of price competitiveness, L1 bidder shall be decided for Item-1, Item-2 and Item-3 separately.			
2.1.4.4	Total quantity for each item shall be splitted in the Ratio of 60%: 40% and shall be awarded as per clause 2.1.4.5. Further, splitting shall not be possible.			
2.1.4.5	<p>Case-I: In case, L1 bidder happens to be MSE:</p> <p>L1 bidder shall be awarded to 60% of total quantity for each items and balance 40% of the quantity shall be awarded to the next bidder in order of their price competitiveness (L2, L3, L4 and henceforth) at L1 price.</p> <p>Case-II: In case, L1 bidder happens to be Non-MSE:</p> <p>a) L1 bidder shall be awarded to 60% of total quantity for each items and balance 40% of the quantity shall be awarded to the next bidder in order of their price competitiveness (L2, L3, L4 and henceforth) at L1 price.</p> <p>b) Further, purchase preference shall be given to MSE-MII bidders for the balance 40% of the quantity of each item in line with Office Order No. F.No. DPE/3(3)/10-Fin dated 29.05.2023 forwarded by Department of Public Enterprises against Department of Expenditure O M No. F.1/4/2021-PPD dated 18.05.2023. In case of subsequent orders issued by the nodal ministry, changing the definition of MSE, the same shall be applicable even if issued after issue of this NIT, but before opening of Part-II bids against this NIT.</p>			
2.2	Brief Scope of work is as follows:			
2.2.1	The scope shall include detailed design as per the requirement mentioned in the BOQ Cum Rate Schedule and as per scope drawing.			
2.2.2	Preparation and submission of general arrangement and detailed working drawings for the proposed design, together with all calculations necessary to verify the adequacy and			

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORKS

	completeness of the design & detailing of sheets with cutting plan, fixtures, flashings and trims to BHEL/Customer for approval.
2.2.3	Preparation of the BOQ consists of the mark no., quantity (Sqm & weight wise) of the sheets for any individual structural building.
2.2.4	Preparation and submission of MQP to BHEL/customer for approval. Supplier has to make the necessary changes in the MQP as per BHEL/customer recommendations.
2.2.5	Arranging the inspection of the colour coated coil at coil manufacturer's/ Supplier's factory and related testing of the coil (chemical & mechanical testing including the Salt spray test) (Pls refer the attached Sample MQP for applicable tests).
2.2.6	Profiling of the sheets shall be commenced as per approved MQP only after obtaining approval of general arrangement, detailed working drawings and colour coated coil at manufacturer's/ Supplier's factory from BHEL/Customer.
2.2.7	Supply of the Sheets shall be commenced to the respective sites as per issued Sub PO only after obtaining approval from BHEL/Customer.
2.2.8	BHEL will reserve the right to inspect/test the material during/after manufacturing at suppliers' works, and/or at BHEL Site. In case of rejection at any stage, supplier shall be liable to replace the materials at his own cost.
2.2.9	<p>When the tests have been satisfactorily completed at the vendor's works, the Inspection Agency shall issue a certificate to that effect within Seven (07) days after completion of tests, but if the tests were not witnessed by the Inspection Agency or his representative, the certificate would be issued within Seven (07) days of the receipt of the test certificates by the Inspection Agency.</p> <p>No material shall be dispatched by supplier unless and until Material Dispatch Clearance Certificate (MDCC) issued by BHEL/Site.</p> <p>BHEL shall issue MRC (duly signed by the BHEL/Customer Site Engineer) after receipt of the material and its physical verification at site generally within Seven (07) days. Vendor shall take alternate action in case of any non-conformity observed during physical verification.</p>
2.3	<p>Colour Coated Coil shall be procured from any one of the Manufacturers cited below:</p> <ul style="list-style-type: none"> (i) Tata Steel BSL Ltd., Raigad & Sahibabad (ii) Tata Bluescope Steel Ltd., Jamshedpur (iii) Essar Steel Ltd., Pune (iv) National Steel & Agro Industries Ltd, Dhar (v) JSW Steel Coated Products Ltd, Kalmeshwar (Nagpur) (vi) JSW Ltd., Thane (vii) Bhushan Power & Steel Ltd., Sambalpur (Odisha)

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORKS

2.3.1	If the bidder wishes to procure other than the above-mentioned Manufacturers, then the bidder shall inform BHEL in their Technical Offer duly filled Annexure-4 and Annexure-5 (Attached). Acceptance of those sources solely lies with BHEL/BHEL's Customer.
2.3.2	<p>If the bidder wishes to procure Hot Rolled Coil from any Manufacturer and further processing including colour coating shall be conducted their Factory, then the bidder shall again inform BHEL in their Technical Offer duly filled Annexure-4 and Annexure-5 (Attached).</p> <p>The approval process shall further include visiting of Factory and related test as per Sl. No. 2.2.5 above shall be performed. Acceptance of those sources solely lies with BHEL/BHEL's Customer.</p>
2.3.3	In case, the proposed Manufacturer/(s) as per Sl. No. 2.3.1 and Sl. No. 2.3.2 above is/are not approved, then bidder has to procure the colour coated coil from Manufacturer listed in Sl. No. 2.3 above only and No compensation shall be payable to the bidder. Hence, Bidder to quote accordingly.
2.4	<p>Tolerance:</p> <p>The quantities given for the rate contract are tentative and may vary within the limits of Plus/Minus (+/-) 25% of awarded rate contract value. Also, no compensation becomes payable in case the contract gets partially executed/ short closed/ terminated/ work withdrawn by BHEL at its discretion. Further, below mentioned tolerance shall be applicable for issuance of Sub-PO subsequently.</p>
2.5	GENERAL
2.5.1	<p>Guarantee / Warranty Period:</p> <p>Guarantee / Warranty period for Supply of material shall be 12 (Twelve) calendar months from the date of last receipt of consignment at site against each Sub-PO.</p> <p>In case of notification of defect, supplier shall replace the defective material free of cost (inclusive of freight, material cost, taxes etc.) up to destination within a period of 30 days from the date of intimation by BHEL.</p>
2.5.2	Test Certificate: Mill Test Certificate for sheet and Supplier's Quality inspection report on Galvanization and/or Paint should be as per specification (normally 2 copies) and extra if demanded by BHEL without any extra cost.
2.5.3	Sample Test: Random sample may be taken by site for third party inspection at the cost of supplier.
2.5.4	Unloading of materials: Unloading of the materials at site is in the scope of BHEL
2.5.5	<p>Documents required with materials for unloading at destination:</p> <p>(i) Duplicate for transporter copy of Invoice</p> <p>(ii) LR copy</p>

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORKS

	<p>(iii) Weighment/ Weighbridge slip</p> <p>(iv) Gate pass</p> <p>(v) Mill Test Certificate</p> <p>(vi) Supplier's Quality inspection report on Galvanization and/or Paint</p> <p>Additionally, one full set photocopy of all the above documents is also required along with supply.</p>
2.5.6	<p>Delivery Destination: The Destination address is as below (Tentative and Final Delivery Destination shall be reflected in the Sub POs)</p> <p>Sold to Party & Ship to Party (Consignee) & Billing Address</p> <p>(i) BHEL Site Office - Construction Manager / Project Director 2X800 MW NTPC Lara Super Thermal Power Station PO - Pussore, Village - Chhapora Dist – Raigarh, Chhattisgarh - 496440 GST No.: 22AAACB4146P1ZP</p> <p>(ii) BHEL Site Office - Construction Manager / Project Director 2X800 MW NTPC Singrauli Super Thermal Power Plant, Stage-III PO – Shaktinagar Distt. – Sonebhadra, Uttar Pradesh (UP) – 231222 GST No.: 09AAACB4146P2ZC</p> <p>(iii) BHEL Site Office - Construction Manager / Project Director 1X800 MW NTPC Sipat Super Thermal Power Plant, Stage-III PO – Ujjwal Nagar Distt. – Bilaspur, Chattisgarh – 495555 GST No.: 22AAACB4146P1ZP</p> <p>(iv) BHEL Site Office - Construction Manager / Project Director 2X800 MW DVC Koderma Super Thermal Power Plant PO – Benjhidi Distt. – Koderma, Jharkhand – 825421 GST No.: 20AAACB4146P5ZP</p> <p>Important Note: Above mentioned destinations are tentative which are various ongoing Projects Sites of the BHEL. Final Destinations shall be intimated separately while placing the Sub-Supply Purchase Orders.</p>
2.5.7	Void
2.5.8	Mode of Dispatch: By Road

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – II: SCOPE OF WORKS

	<p>Note: It is Supplier responsibility to ensure availability of vehicle well in advance for dispatch of material to meet contractual delivery requirement and as per instruction of BHEL engineer.</p> <p>Road Permit Requirement: As per requirement to be arranged by Supplier.</p>
2.5.9	<p>Transit Insurance: Transit insurance from supplier's works/warehouse to BHEL site stores shall be arranged by BHEL.</p> <p>Prior dispatch of each consignment, intimation shall be issued to Insurance agency/underwriter of BHEL about the value of consignment, dispatch details, along with one set of documents consisting of LR/RR copy, packing list / Challan indicating the items dispatched (with their weights). A copy of above should be sent to BHEL Respective site office (address same as delivery destination).</p> <p>Upon dispatch of material, supplier has to immediately intimate underwriter of BHEL, failing which transit loss if any, would be borne by supplier.</p> <p>Supplier shall obtain details of Insurance agency & policy documents from BHEL prior to dispatch of first consignment of material to site.</p>
2.5.10	<p>Packing:</p> <ul style="list-style-type: none">a) The packing shall be in conformity with specification and shall be such as to ensure prevention of damages, corrosion, deterioration, shortages, pilferage and loss in transit or storage.b) Packing list shall be submitted as per standard format along with advance set of documents for claiming payment which shall also indicate: -<ul style="list-style-type: none">(i) Packing size.(ii) Gross weight and net weight of each package.(iii) Contents of the package with quantity of each item separately.
2.5.11	<p>Transportation & Freight Charges:</p> <ul style="list-style-type: none">a) All road dispatches shall be through the carriers.b) Owing to any reason, in case the seller / vendor has to resort to a mode of transport other than what was contemplated, to keep up the delivery / completion schedule incurring extra expenditure, such extra expenditure shall be borne by the seller / vendor.c) Any charge against ODC consignment shall be borne by seller / vendor.d) Freight charges shall be borne by the seller / vendor. <p>Any charges related to the transportation of material till site is to be borne by the seller / vendor.</p>

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – III: TIME SCHEDULE

3	<p>Time Schedule:</p> <p>Duration of Framework Agreement for “supply of Supply of Permanently Colour Coated Metal Sheet Decking Plate, Permanently Colour Coated Metal Cladding Sheet and Factory made Prefabricated Sandwiched Permanently Colour Coated Metal Cladding Sheet to the designated project sites” shall be Twenty Four (24) Months from issuance of LOA.</p>																																
3.1	<p>Delivery period from the date of intimations (Through mail / Separate Sub POs) shall be as follows:</p> <p>(i) If Ordered Qty is up to 150 MT – Within 10 weeks from the date of intimation.</p> <p>(ii) If ordered Qty is more than 150 MT and less than 300 MT – 12 weeks from the date of intimation.</p> <p>(iii) If ordered Qty is more than 300 MT - 15 weeks from the date of intimation.</p> <p>Note: Date of intimation shall be after considering time frame required for submission and approval of various process listed as Sl. No. 3.2 below.</p>																																
3.2	<p>Time Schedule for various in process activities:</p> <table><tr><th rowspan="2">Sl. No.</th><th rowspan="2">Activities</th><th rowspan="2">Time Frame</th><th colspan="2">Input Provided By</th></tr><tr><th>BHEL</th><th>Supplier</th></tr><tr><td>1</td><td>Submission of Engineering Drawing, Design and Load Data</td><td>Within Seven (07) days from the date of issuance of Sub-PO.</td><td>Yes</td><td></td></tr><tr><td>2</td><td>Submission of general arrangement and detailed working drawings with cutting plan for the proposed design, together with all calculations.</td><td>Within Seven (07) days from the date of submission of Engineering Drawing, Design and Load Data by BHEL.</td><td></td><td>Yes</td></tr><tr><td>3</td><td>Approval of submitted general arrangement and detailed working drawings with cutting plan.</td><td>Within Seven (07) days from the date of submission of general arrangement and detailed working drawings with cutting plan by Supplier.</td><td>Yes</td><td></td></tr><tr><td>4</td><td>Submission of MQP</td><td>Within Seven (07) days from the date of issuance of Sub-PO.</td><td></td><td>Yes</td></tr><tr><td>5</td><td>Approval of MQP</td><td>Within Seven (07) days from the date of</td><td>Yes</td><td></td></tr></table>	Sl. No.	Activities	Time Frame	Input Provided By		BHEL	Supplier	1	Submission of Engineering Drawing, Design and Load Data	Within Seven (07) days from the date of issuance of Sub-PO.	Yes		2	Submission of general arrangement and detailed working drawings with cutting plan for the proposed design, together with all calculations.	Within Seven (07) days from the date of submission of Engineering Drawing, Design and Load Data by BHEL.		Yes	3	Approval of submitted general arrangement and detailed working drawings with cutting plan.	Within Seven (07) days from the date of submission of general arrangement and detailed working drawings with cutting plan by Supplier.	Yes		4	Submission of MQP	Within Seven (07) days from the date of issuance of Sub-PO.		Yes	5	Approval of MQP	Within Seven (07) days from the date of	Yes	
Sl. No.	Activities				Time Frame	Input Provided By																											
		BHEL	Supplier																														
1	Submission of Engineering Drawing, Design and Load Data	Within Seven (07) days from the date of issuance of Sub-PO.	Yes																														
2	Submission of general arrangement and detailed working drawings with cutting plan for the proposed design, together with all calculations.	Within Seven (07) days from the date of submission of Engineering Drawing, Design and Load Data by BHEL.		Yes																													
3	Approval of submitted general arrangement and detailed working drawings with cutting plan.	Within Seven (07) days from the date of submission of general arrangement and detailed working drawings with cutting plan by Supplier.	Yes																														
4	Submission of MQP	Within Seven (07) days from the date of issuance of Sub-PO.		Yes																													
5	Approval of MQP	Within Seven (07) days from the date of	Yes																														

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – III: TIME SCHEDULE

			submission of MQY by Supplier.		
3.3	Last Sub-PO shall be issued at least Six (06) Month prior to the completion of duration of Framework Agreement.				

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – IV: TERMS OF PAYMENT

4.0	Terms of Payment:
4.1	Measurement of material supplies shall be on the weighment basis.
4.2	The contractor shall submit his RA bills with all the details required by BHEL covering measurement of supplies in all respects.
4.3	Release of payment in each running bill including PVC Bills where ever applicable will be the value of supplies admitted as per stages of progressive pro rata payments.
4.4	<p>For MSME suppliers: 100% payment (excluding GST) for running bills will be paid through TReDS such as Receivable Exchange of India Limited (RXIL), M1 Exchange, Invoice art, etc. as per extant guidelines after receipt & acceptance of material at site and submission of following documents.</p> <p>For Non-MSME suppliers: 100% of payment (excluding GST) for running bills will normally be released within 45 days of after receipt & acceptance of material at site and submission of following documents:</p> <ul style="list-style-type: none"> a) GST Compliance Invoice (1 Original/e-invoice + 2 copies) b) Copy of insurance intimation letter / e-mail. (Intimation to Insurance agency to be sent on the same day of dispatch.) c) LR copy (consignee address shall be BHEL Lara site) d) Packing List indicating item description/quantity/Net Weight against each item dispatched – wherever applicable. e) Original Material Dispatch Clearance Certificate issued by BHEL/BHEL's Customer. f) Guarantee Certificate – Original g) Material Receipt certificate by BHEL/site. h) Material test Certificate (MTC) (for raw material supplied by Vendor)
4.5	<p>Retention Amount for Respective POs issued by PS-Regions – 5% of payment shall be withheld from each RA Bills and released after successful completion of supply and along with Final Bill.</p> <p>On specific request of contractor, 5% amount can be released against submission of Bank Guarantee of 5% of Sub-PO value, in acceptable form. Also, upon submission of the aforementioned BG, further deduction of 5% from RA Bill shall not be made. BG shall be kept valid for a period of Contract duration and Extension if any. (Retention BG Format to be referred.)</p>
4.6	Performance Security shall be 5% of each Sub-PO Value issued by Respective PS-Region and shall be dealt as per Clause 2.13 of GCC. In case of increase in Sub-PO value, additional 5% of differential/increased amount shall be submitted by Supplier before payment of next RA Bill due.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – IV: TERMS OF PAYMENT

4.7	Applicable GST shall be released upon compliance of following documents: Vendor has to declare such Invoice in their GSTR-1 & has to pay the tax to the Government by filing GSTR-3B or any other return/form for payment of tax so that Vendor's invoice details appear in BHEL's GSTR-2A. Payment may not be released if above is not complied & invoice details do not appear in BHEL's GSTR-2A.			
4.8	Paying Authority shall be respective project sites of the BHEL, to whom materials will be supplied. Final Destinations shall be intimated separately while placing the Sub -Supply Purchase Order.			
4.9	Price Variation Compensation:			
4.9.1	In order to take care of variation in cost of material on either side, due to variation in the index of LABOUR, HIGH SPEED DIESEL OIL, HOT ROLLED (HR) COIL, Price Variation Formula as described herein shall be applicable.			
4.9.2	85% component of Award Value shall be considered for PVC calculations and remaining 15% shall be treated as fixed component. The basis for calculation of price variation in each category, their component, Base Index, shall be as under:			
4.9.2.1	Sl. No.	Category	Index	Percentage Component
	1	LABOUR (ALL CATEGORIES)	MONTHLY ALL-INDIA AVERAGE CONSUMER PRICE INDEX NUMBERS FOR INDUSTRIAL WORKERS' published by Labour Bureau, Ministry of Labour and Employment, Government of India (Website: labourbureau.nic.in)	5%
	2	HIGH SPEED DIESEL OIL	Name of Commodity: HSD Type – Individual Commodities (See Note)	5%
	3	HOT ROLLED (HR) COIL	Name of Commodity: Hot Rolled (HR) Coils & Sheets, including Narrow Strip Type: Individual Commodity (See Note)	65%
	4	PAINT	Name of Commodity: Paint Type: Individual Commodity (See Note)	10%
4.9.2.2	NOTE: As per the 'MONTHLY WHOLE SALE PRICE INDEX' for the respective Commodity and Type, published by Office of Economic Adviser, Ministry of Commerce and Industry,			

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – IV: TERMS OF PAYMENT

	Government of India. (Website: eaindustry.nic.in). Revisions in the index or commodity will be re-adjusted accordingly.
4.9.3	<p>Payment/recovery due to variation in index shall be determined on the basis of the following notional formula in respect of the identified COMPONENT ('K') viz LABOUR, HIGH SPEED DIESEL OIL, HOT ROLLED (HR) COIL, PAINT.</p> $P = K \times R \times (XN - X_o)/X_o$ <p>Where,</p> <p>P = Amount to be paid/recovered due to variation in the Index for LABOUR, HIGH SPEED DIESEL OIL, HOT ROLLED (HR) COIL, PAINT</p> <p>K = Percentage COMPONENT ('K') applicable for LABOUR, HIGH SPEED DIESEL OIL, HOT ROLLED (HR) COIL, PAINT</p> <p>R = Amount of supplies for the billing month (Excluding Taxes and Duties if payable extra)</p> <p>XN = Revised Index for LABOUR, HIGH SPEED DIESEL OIL, HOT ROLLED (HR) COIL, PAINT for the billing month under consideration</p> <p>Xo = Index for LABOUR, HIGH SPEED DIESEL OIL, HOT ROLLED (HR) COIL, PAINT as on the Base date</p>
4.9.4	PVC will be payable for items supplied including quantity variation of BOQ items under originally awarded contract.
4.9.5	Base date shall be calendar month of the 'last date of submission of Tender'.
4.9.6	The contractor shall furnish necessary monthly bulletins in support of the requisite indices from the relevant websites along with his Bills.
4.9.7	The contractor will be required to raise the bills for price variation payments for each RA Bill/(s) irrespective of the fact whether any increase/decrease in the index for relevant categories has taken place or not. In case there is delay in publication of bulletins (final figure), the provisional values as published can be considered for payments and arrears shall be paid/recovered on getting the final values.
4.9.8	<p>PVC shall be applicable for the entire original contract period plus the extended period, i.e. for the complete execution period, as follows:</p> <p>For PVC computation of the nth month:</p> <p>Let the cumulative delay attributable to the Contractor is Dn in the nth month as per delay analysis.</p> <p>Considering Rn as the billing value for the nth month, PVC for the nth month shall be calculated as follows:</p> <ol style="list-style-type: none"> PVC for the portion of Rn for an amount of D(n-1) shall be payable as per indices for the (n-1)th month. PVC for the balance portion of Rn shall be payable as per indices for the nth month.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – IV: TERMS OF PAYMENT

	<p>In case $D(n-1)$ is greater than R_n, then entire R_n shall be payable as per indices for the $(n-1)$th month and the balance portion of $D(n-1)$ shall be adjusted from $R(n+1)$ of the $(n+1)$th month and will be payable as per indices for the $(n-1)$th month. The above process shall be continued for subsequent month(s) also till full $D(n-1)$ is consumed.</p> <ul style="list-style-type: none"> ➤ For milestones mentioned in the contract, PVC shall be applicable as per average of the indices from the month of base date till the month of execution of milestone. ➤ PVC shall not be applicable for time extension provided for the delays solely attributable to the contractor.
4.9.9	The total amount of PVC shall not exceed 15% of the cumulatively executed contract value. Executed contract value for this purpose is exclusive of PVC except items due to quantity variation.
4.10	Liquidated Damage:
4.10.1	LD shall be 0.5% of the Sub-PO Value per week of delay or part thereof subject to a maximum of 10% of the Sub-PO Value.
4.10.2	In case of any amendment/ revision, the LD shall be linked to the amended/revised Sub-PO value.
4.10.3	<p>Any delay in intermediate activity including Supplies to the destination from schedule completion period due to reasons solely attributable to Supplier, the excess period shall be considered for LD purpose.</p> <p>In case, the delay is not attributable to supplier, suitable time extension shall be provided with existing terms and conditions.</p>

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – V: TAXES AND DUTIES

5.0	TAXES & DUTIES
5.1	<p>The contractor shall pay all (save the specific exclusions as enumerated in this clause) taxes, fees, license, charges, deposits, duties, tools, royalty, commissions, other charges, etc. which may be levied on the input goods & services consumed and output goods & services delivered in course of his operations in executing the contract. In case BHEL is forced to pay any of such taxes/duties, BHEL shall have the right to recover the same from his bills or otherwise as deemed fit.</p> <p>However, provisions regarding GST on output supply (goods/service) and TDS/TCS as per Income Tax Act shall be as per following clauses.</p>
5.2	GST (Goods and Services Tax)
5.2.1	<p>GST as applicable on output supply (goods/services) are excluded from contractor's scope; therefore, contractor's price/rates shall be exclusive of GST. Reimbursement of GST is subject to compliance of following terms and conditions. BHEL shall have the right to deny payment of GST and to recover any loss to BHEL on account of tax, interest, penalty etc. for non-compliance of any of the following condition.</p>
5.2.2	<p>The admissibility of GST, taxes and duties referred in this chapter or elsewhere in the contract shall be limited to direct transactions between BHEL & its Contractor. BHEL shall not consider GST on any transaction other than the direct transaction between BHEL & its Contractor.</p>
5.2.3	<p>Contractor shall obtain prior written consent of BHEL before billing the amount towards such taxes. Where the GST laws permit more than one option or methodology for discharging the liability of tax/levy/duty, BHEL shall have the right to adopt the appropriate one considering the amount of tax liability on BHEL/Client as well as procedural simplicity with regard to assessment of the liability. The option chosen by BHEL shall be binding on the Contractor for discharging the obligation of BHEL in respect of the tax liability to the Contractor.</p>
5.2.4	<p>Contractor has to submit GST registration certificate of the concerned state. Contractor also needs to ensure that the submitted GST registration certificate should be in active status during the entire contract period.</p>
5.2.5	<p>Contractor/Vendor has to issue Invoice/Debit Note/Credit Note indicating HSN/SAC code, Description, Value, Rate, applicable tax and other particulars in compliance with the provisions of relevant GST Act and Rules made thereunder.</p>
5.2.6	<p>Vendor has to submit GST compliant invoice within the due date of invoice as per GST Law. In case of delay, BHEL reserves the right of denial of GST payment if there occurs any hardship to BHEL in claiming the input thereof. In case of goods, vendor has to provide scan copy of invoice & GR/LR/RR to BHEL before movement of goods starts to enable BHEL to meet its GST related compliances. Special care should be taken in case of month end transactions.</p>
5.2.7	<p>Void</p>
5.2.8	<p>Subject to other provisions of the contract, GST amount claimed in the invoice shall be released on fulfilment of all the following conditions by the Contractor: -</p>

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – V: TAXES AND DUTIES

	<ul style="list-style-type: none"> a. Supply of goods and/or services have been received by BHEL. b. Original Tax Invoice has been submitted to BHEL. c. Contractor/ Vendor has submitted all the documents required for processing of bill as per contract/ purchase order/ work order. d. In cases where e-invoicing provision is applicable, vendor/contractor is required to submit invoice in compliance with e-invoicing provisions of GST Act and Rules made thereunder. e. Contractor has filed all the relevant GST return (e.g. GSTR-1, GSTR-3B, etc.) pertaining to the invoice submitted and submit the proof of such return along with immediate subsequent invoice. In case of final invoice/ bill, contractor has to submit proof of such return within fifteen days from the due date of relevant return. f. Respective invoice has appeared in BHEL's GSTR - 2A for the month corresponding to the month of invoice and in GSTR-2B of the month in which such invoices has been reported by the contractor along with status of ITC availability as "YES" in GSTR-2B. Alternatively, BG of appropriate value may be furnished which shall be valid at least one month beyond the due date of confirmation of relevant payment of GST on GSTN portal or sufficient security is available to adjust the financial impact in case of any default by the contractor. g. Contractor has to submit an undertaking confirming the payment of all due GST in respect of invoices pertaining to BHEL.
5.2.9	Any financial loss arises to BHEL on account of failure or delay in submission of any document as per contract/purchase order/work order at the time of submission of Tax invoice to BHEL, shall be deducted from contractor's bill or otherwise as deemed fit.
5.2.10	TDS as applicable under GST law shall be deducted from contractor's bill.
5.2.11	Contractor shall comply with the provisions of e-way bill wherever applicable. Further wherever provisions of GST Act permit, all the e-way bills, road permits etc. required for transportation of goods needs to be arranged by the contractor.
5.2.12	Contractor shall be solely responsible for discharging his GST liability according to the provisions of GST Law and BHEL will not entertain any claim of GST/interest/penalty or any other liability on account of failure of contractor in complying the provisions of GST Law or discharging the GST liability in a manner laid down thereunder.
5.2.13	In case declaration of any invoice is delayed by the vendor in his GST return or any invoice is subsequently amended/alterd/deleted on GSTN portal which results in any adverse financial implication on BHEL, the financial impact thereof including interest/penalty shall be recovered from the Contactor's due payment.

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter – V: TAXES AND DUTIES

5.2.14	Any denial of input credit to BHEL or arising of any tax liability on BHEL due to non-compliance of GST Law by the Contractor in any manner, will be recovered along with liability on account of interest and penalty (if any) from the payments due to the Contactor.
5.2.15	In the event of any ambiguity in GST law with respect to availability of input credit of GST charged on the invoice raised by the contractor or with respect to any other matter having impact on BHEL, BHEL's decision shall be final and binding on the contractor.
5.2.16	<p><u>Variation in Taxes & Duties:</u></p> <p>Any upward variation in GST shall be considered for reimbursement provided supply of goods and services are made within schedule date stipulated in the contract or approved extended schedule for the reason solely attributable to BHEL. However downward variation shall be subject to adjustment as per actual GST applicability.</p> <p>In case the Government imposes any new levy/tax on the output service/goods after price bid opening, the same shall be reimbursed by BHEL at actual. The reimbursement under this clause is restricted to the direct transaction between BHEL and its contactor only and within the contractual delivery period only.</p> <p>In case any new tax/levy/duty etc. becomes applicable after the date of Bidder's offer but before opening of the price Bid, the Bidder/Contractor must convey its impact on his price duly substantiated by documentary evidence in support of the same before opening of price bid. Claim for any such impact after opening the price bid will not be considered by BHEL for reimbursement of tax or reassessment of offer.</p>
5.3	<p><u>Income Tax:</u></p> <p>TDS/TCS as applicable under Income Tax Act, 1961 or rules made thereunder shall be deducted/collected from contractor's bill.</p>

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VI : BOQ CUM RATE SCHEDULE

BOQ CUM RATE SCHEDULE FOR ITEM-1- Metal Deck Sheet:

ST NO	ITEM DESCRIPTION	UOM	QTY	RATES = TOTAL QUOTED PRICE * WEIGHTAGE / (QUANTITY * 100)	AMOUNT (INR) = RATE * QUANTITY	WEIGHTAGE IN % (UPTO DECIMAL POINT)
Item-1	Refer Clause 2.1.1 of TCC:					
A1502	METAL DECK SHEET Type-I, Supplying permanently color coated galvanized MS troughed metal sheet decking plate of approved colour over roof purlins for cast-in-situ roof slab as per relevant IS code and Grade as per specification. Bare metal thickness(BMT) of deck plate shall be minimum 0.8mm with minimum trough depth of 44mm (or as per design whichever is higher) of grade G250 as per AS1397/grade SS255 as per ASTM A653M/ grade S250GD as per EN 10326 with zinc coating to class Z275 and shall serve as permanent shuttering to the roof slab 40mm - 100mm thick measured over crest of metal decking & shall have adequate strength to support weight of green concrete and imposed loads of min 100 kg/sqm (for two span condition) during construction between beams as per manufacturer's recommendations/ calculations/ test certificates for approval including fixing of plates to beams, side lapping, end lapping etc. all complete for below mentioned spans. The sheet shall be permanently coated with silicon modified polyester (SMP silicon content 30%-50%) paint or super polyester paint of minimum 20 micron DFT on exposed surface (facing operating floor) over primer coat of minimum 5 micron(nominal) and minimum 10 micron (nominal) SMP or super polyester paint over primer coat of minimum 5 micron (nominal) on other face. SMP and polyester paint system shall be of industrial finish of product type 4 of AS/NZ2728					
a	Span Upto 1800mm	MT	282.50			17.2224593062

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VI : BOQ CUM RATE SCHEDULE

ST NO	ITEM DESCRIPTION	UOM	QTY	RATES = TOTAL QUOTED PRICE * WEIGHTAGE / (QUANTITY * 100)	AMOUNT (INR) = RATE * QUANTITY	WEIGHTAGE IN % (UPTO DECIMAL POINT)
B1502	METAL DECK SHEET Type-II, Supplying permanently color coated galvanized MS troughed metal sheet decking plate of approved colour over roof purlins for cast-in-situ roof slab as per relevant IS code and Grade as per specification. Bare metal thickness(BMT) of deck plate shall be minimum 0.8mm with minimum trough depth of 44 mm (or as per design whichever is higher) of grade G250 as per AS1397/grade SS255 as per ASTM A653M/ grade S250GD as per EN 10326 with zinc coating to class Z275 and shall serve as permanent shuttering to the floor slab 150 mm thick measured over crest of metal decking & shall have adequate strength to support weight of green concrete and imposed loads of min 100 kg/sqm (for two span condition) during construction between beams as per manufacturer's recommendations/ calculations/ test certificates for approval including fixing of plates to beams, side lapping, end lapping etc. all complete for below mentioned spans. The sheet shall be permanently coated with silicon modified polyester(SMP silicon content 30%-50%) paint or super polyester paint of minimum 20 micron DFT on exposed surface (facing operating floor) over primer coat of minimum 5 micron(nominal) and minimum 10 micron (nominal) SMP or super polyester paint over primer coat of minimum 5 micron (nominal) on other face. SMP and polyester paint system shall be of industrial finish of product type 4 of AS/NZ2728.					
a	Span Upto 1800mm	MT	1125.40			68.6094007194
b	Span Exceeding 1800mm and upto 2500 mm	MT	232.40			14.1681399744

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VI : BOQ CUM RATE SCHEDULE

BOQ CUM RATE SCHEDULE FOR ITEM-2- Metal Cladding Sheet:

ST NO	ITEM DESCRIPTION	UOM	QTY	RATES	AMOUNT (INR) = RATE * QUANTITY
Item-2	Refer Clause 2.1.2 of TCC				
A1505	Supplying External/ Inner sheet of Permanent colour coated metal cladding with troughed M.S. sheets of minimum 0.5 mm bare metal thickness of min. grade G350 as per AS1397/grade SS340 class 4 or as per ASTM A792M/ grade S350 GD as per EN 10326 with zinc coating to class Z275 / aluminium zinc alloy coating to class AZ150 on both sides. The exposed face the sheet shall be permanently coated with silicon modified polyester (SMP silicon content 30%-50%) paint or super polyester paint of minimum 20 micron DFT on exposed surface over primer coat of minimum 5 micron and minimum 10 micron SMP or super polyester paint over primer coat of minimum 5 micron on other face. SMP and polyester paint system shall be of industrial finish of product type 4 of AS/NZ2728.	MT	1797.10		

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VI : BOQ CUM RATE SCHEDULE

BOQ CUM RATE SCHEDULE FOR ITEM-3- **Factory made Prefabricated Sandwiched Metal Cladding Sheet:**

ST NO	ITEM DESCRIPTION	UOM	QTY	RATES	AMOUNT (INR) = RATE * QUANTITY
Item-3	Refer Clause 2.1.3 of TCC				
A1519	Supplying Factory made (Continuous Line) prefabricated sandwiched Permanent colour coated metal cladding comprising top sheets as troughed (minimum depth of trough shall be 30 mm) permanently colour coated sheet & bottom sheet as plain permanently colour coated for covering of exposed metal/concrete / brick surfaces with insulation shall be of Polyurethane type of minimum 50mm thick (excluding trough). The polyurethane shall be Chlorofluorocarbon (CFC) free and self-extinguishing and shall conform to IS 12436: 1988. It shall have Modular Density 40 +/- 2 Kg/m ³ and Thermal Conductivity @ 10 Deg.C 0.017 - 0.020 W/M Ok, Water absorption (% by vol) 3.1, Critical Oxygen Index 23 and Compressive Strength 1.2 Kg/sq.cm, sandwiched between the two sheets, each sheet shall be high strength tensile steel sheet 0.5mm bare metal thickness (minimum) of YS350 as per IS 15961 / grade G350 as per AS1397 / grade SS340 class 4 as per ASTM A792M / grade S350GD as per EN 10326 with zinc coating to class Z 275 / aluminium-zinc alloy coating to class AZ150 on both sides, both sheet shall be permanently coated with silicon modified polyester (SMP with silicon content of 30% to 50%) paint of minimum 20 micron DFT on exposed surface on 5 microns (min.) epoxy primer/phosphate primer coat and 10 micron (min.) SMP on 5 micron (min.) epoxy primer/phosphate primer on other face, SMP paint system shall be of industrial finish of product type 4 of AS/NZS 2728, troughed sheet shall be of approved profile, sectional properties, (suitable for the specified loading / deflection and purlins / runner spacing), colour and shade and tested for 1000 hours salt spray test. Coated surface shall be provided with a protected guard film (polyethylene) of about 40 microns to avoid any damage to the coating during handling. Overlap shall be min. 100 mm or as specified by manufacturer.	MT	467.20		

TECHNICAL CONDITIONS OF CONTRACT (TCC)

Chapter-VII : ANNEXURE

7.1	Declaration by Bidder (Annexure-1)
7.2	Details of supplied material as per POs for satisfying PQR (Annexure-2)
7.3	Format for additional vendor approval from customer (Annexure-4) and (Annexure-5)

Annexure-1

DECLARATION BY BIDDERS (Selection of Mode)

Job Description:	Supply of Permanently Colour Coated Metal Sheet Decking Plate, Permanently Colour Coated Metal Cladding Sheet and Factory made Prefabricated Sandwiched Permanently Colour Coated Metal Cladding Sheet for the following project sites ➤ 2X800 MW NTPC Lara Super Thermal Power Station ➤ 2X800 MW NTPC Singrauli Super Thermal Power Plant, Stage-III ➤ 1X800 MW NTPC Sipat Super Thermal Power Plant, Stage-III ➤ 2X800 MW DVC Koderma Super Thermal Power Plant	
MODES AS PER TCC CLAUSE NO. 2.ii	Bidders to mandatorily mention: (YES / NO)	
Quoted for Item-1	
Quoted for Item-2	
Quoted for Item-3	

Note:

1. Price Bids of only those bidders shall be opened, who stands qualified after compliance of criteria A to E as detailed under PQR (Annexure-1) above.
2. Price Bid(s) submitted by bidder for Item-1, Item-2 and Item-3 shall be opened based on the declaration by the bidder(s).
3. **Mode against which Bidders have mentioned “No”, those price bid shall not be opened and bidders shall be disqualified for those mode.**

**(Signature, Date & Seal of
Authorized Signatory of the Bidder)**

Tender Enquiry No. BHEL/CPC/FA/DECK_CLADDING SHEET/25/87 for Supply of Permanently Colour Coated Metal Sheet Decking Plate, Permanently Colour Coated Metal Cladding Sheet and Factory made Prefabricated Sandwiched Permanently Colour Coated Metal Cladding Sheet

[illegible]

CORPORATE QUALITY ASSURANCE

VENDOR'S PROPOSAL CUM EVALUATION REPORT

ANNEXURE- 4										(P4F1R0)	
*Supplier has to submit all the documents as per the annexures cited here and naming philosophy must be as prescribed in this document											
Ref No:						Date:					
i. Main Contractor		Bharat Heavy Electricals Limited									
ii. Project											
iii. Package Name						Package No					
iv. Proposed Item/Scope of Sub-contracting		COLOUR COATED METAL DECK & CLADDING/ROOFING SHEET (COIL)									
v. Item covered under		Schedule-1		<input type="checkbox"/>		As per contract clause No-		<input type="checkbox"/>			
		Schedule-2		<input type="checkbox"/>							
vi. If item is Schedule-1 and proposed sub-vendor is indigenous, Main Contractor to explain how the contractual provisions will be fulfilled											
vii. Name and Address of the proposed Sub-vendor's works: -											
viii. PO placement date/ Start of manufacturing (if self-manufactured) as per L2 network										Under evaluation	
ix. Item Description (Type/Size/Rating/Scope of Sub-Contracting)		Total quantity of proposed item envisaged in this package (Nos/ Running Meters/ Kgs/ Tons etc)		Quantity proposed to be procured from proposed sub-vendor (Nos/ Running Meters /Kgs /Tons etc)		Timeline for quantity requirements as per project schedule & whether the proposed Sub-vendor equipped with adequate capacity to supply proposed order quantity in time					
x. Supply experience of the proposed sub-vendor (including supplies to Main Contractor, if any) for similar item/scope of sub-contracting, for last 3 years (Note:- Only relevant experience details w.r.t. proposed item/scope of subcontracting to be brought out here)											
Project/Package		Customer Name		Supplied Item (Type/Rating/Model /Capacity/Size etc)		PO ref no/date		Supplied Quantity		Date of Supply	
As per Annexure-F.2.12											
<i>We confirm that as per our assessment, the proposed sub-vendor has requisite capabilities & supply experience and is suitable for supplying the proposed item/scope of sub-contracting.</i>											
Name:		Desig:		Contact No:		Sign:		Date:			

Company's Seal/Stamp: -

	<p align="center">CORPORATE QUALITY ASSURANCE</p> <p align="center">VENDOR QUESTIONNAIRE</p>
--	--

ANNEXURE-5		(P4F2R0)	
<p><i>*Supplier has to submit all the documents as per the annexures cited here and naming philosophy must be as prescribed in this document</i></p>			
i.	Item/Scope of Sub-contracting		
ii.	Address of the registered office	Details of Contact Person (Name, Designation, Mobile, Email)	
iii.	Name and Address of the proposed Sub-vendor's works where item is being manufactured	Details of Contact Person: (Name, Designation, Mobile, Email)	
iv.	Annual Production Capacity for proposed item/scope of sub-contracting		
v.	Annual production for last 3 years for proposed item/scope of sub-contracting		
vi.	Details of proposed works		
1.	Year of establishment of present works		
2.	Year of commencement of manufacturing at above works		
3.	Details of change in Works address in past (if any)		
4.	Total Area		
	Covered Area		
5.	Factory Registration Certificate	(Details to be attached as Annexure – F2.1)	
6.	Design/ Research & development set-up (No. of manpower, their qualification, machines & tools employed etc.)	Applicable / Not applicable if manufacturing is as per Main Contractor/purchaser design (Details to be attached as Annexure – F2.2) (if applicable)	
7.	Overall organization Chart with Manpower Details (Design/Manufacturing/Quality etc.)	(Details to be attached as Annexure – F2.3)	

	<p align="center">CORPORATE QUALITY ASSURANCE</p> <p align="center">VENDOR QUESTIONNAIRE</p>
--	--

8.	After sales service set up in India, in case of foreign sub-vendor <i>(Location, Contact Person, Contact details etc.)</i>			<i>Applicable / Not applicable</i> <i>(Details to be attached as Annexure – F2.4)</i>		
9.	Manufacturing process execution plan with flow chart indicating various stages of manufacturing from raw material to finished product including outsourced process, if any.			<i>(Details to be attached as Annexure – F2.5)</i>		
10.	Sources of Raw Material/Major Bought Out Item			<i>(Details to be attached as Annexure – F2.6)</i>		
11.	Quality Control exercised during receipt of raw material/BOI, in-process, Final Testing, packing			<i>(Details to be attached as Annexure – F2.7)</i>		
12.	Manufacturing facilities <i>(List of machines, special process facilities, material handling etc.)</i>			<i>(Details to be attached as Annexure – F2.8)</i>		
13.	Testing facilities <i>(List of testing equipment)</i>			<i>(Details to be attached as Annexure – F2.9)</i>		
14.	If manufacturing process involves fabrication then- List of qualified Welders List of qualified NDT personnel with area of specialization			<i>(Details to be attached as Annexure – F2.10)</i> <i>(if applicable)</i>		
15.	List of out-sourced manufacturing processes with Sub-Vendors' names & addresses			<i>Applicable / Not applicable</i> <i>(Details to be attached as Annexure –F2.11)</i> <i>(if applicable)</i>		
16.	Supply reference list including recent supplies			<i>Details to be attached as Annexure – F2.12</i> <i>(as per format given below)</i>		
	Project/ package	Customer Name	Supplied Item (Type/Rating/Model /Capacity/Size etc)	PO ref no/date	Supplied Quantity	Date of Supply
17.	Product satisfactory performance feedback letter/certificates/End User Feedback			<i>(Details to be attached as Annexure - F2.13)</i>		

	<p align="center">CORPORATE QUALITY ASSURANCE</p> <p align="center">VENDOR QUESTIONNAIRE</p>
--	--

18.	Summary of Type Test Report (Type Test Details, Report No, Agency, Date of testing) for the proposed product (similar or higher rating) Note: - Reports need not to be submitted	Applicable / Not applicable <i>(Details to be attached as Annexure – F2.14)</i> <i>(if applicable)</i>
19.	Statutory / mandatory certification for the proposed product	Applicable / Not applicable <i>(Details to be attached as Annexure – F2.15)</i> <i>(if applicable)</i>
20.	Copy of ISO 9001 certificate (if available)	<i>(Details to be attached as Annexure – F2.16)</i>
21.	Product technical catalogues for proposed item (if available)	<i>(Details to be attached as Annexure – F2.17)</i>

Name:		Desig:		Sign:		Date:	

Company's Seal/Stamp:-



COMMENTS RESOLUTION SHEET-QP No 9585-001-315-QVC-Q-002B REV 02 Dated 10.08.2021

Sr. No	CL	NTPC comments	BHEL reply
1	Page -1	Please specify coil manufacturer's name and address	Noted & added
2	2	Mechanical Test-100%	Noted & added
3	5	Thickness of Colour Coating (SMP/ SP) Both Side	Noted & added
4	7	Hardness of Painted Surface Scratch –Resistance test	Noted & added
5	8	Bend test- paint adhesion –Both Side	Noted & added
6	10	Impact Resistance Test- To check Loss of adhesion on both sides	Noted & added
7	Remark-2	Samples to be selected and identified by NTPC for testing at any NTPC approved lab or any 3rd party lab complying ISO/IEC-17025 accredited by NABL or such accrediting agency and test shall be witnessed by NTPC including verification of calibration status. For long duration/ sample conditioning involving long duration may be left to the labs, but the sample shall be handed over to testing labs by NTPC representatives. BHEL Approved Supplier- for Profiling	Noted & added
8		Signature Noted & added	Noted & added
9		Doc Rev to be updated	Noted & added
10		C: Main contractor or its appointed authority duly approved by	Noted & added

Signature Noted & added

Date: 20/08/2021
17:33:59 IST

Reason: CAT I

Location: NTPC EOC


Praveen Kumar
Kumar
Pandey

Praveen Kumar Pandey

ANX II		MANUFACTURERS NAME & ADDRESS		MANUFACTURERS QUALITY PLAN												
		M/s Tata Steel BSL Limited 23, Site IV, Sahibabad Industrial Area Ghaziabad (UP) - 201010		Item: Supply of MS Deck Sheet		QP No. 9585-001-315-QVC-Q-002B										
		BHEL Approved Supplier (For Profiling)		Job No. 0		Date:09.08.2021										
		M/s Nandani Roofing Systems Private Limited D-31, Meerut Road Industrial Area, Ghaziabad (UP) - 201001		SUB - SUSTEM :Supply of MS Deck Sheet		REV. 2										
				2		PAGE 1 of 3										
S.NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD			AGENCY			REMARKS		
1	8	2	3	5	6	7	8	9	D*	**10			11			
	Bend Test (Paint Adhesion both side)	To check no peeling and cracking of paint film on T Bend	Major	Mechanical Test	100%	3 Samples per Lot	NTPC Technical Specification / AS 2728	Test Report	V	P	W	W				
	1000 Hrs Salt Spray Test (corrosion resistance Test	To check corrosion	Major	Chemical Test	Refer Remark 2	NTPC Technical Specification ASTM B117/IS:9844-1981	No Corrosion on Exposed Side	3rd Party Test Report	V	P	V	V	See Remark 2			
	Impact Resistance Test	To check Loss of adhesion on both side.	Major	Mechanical Test	100%	3 Samples per Lot	NTPC Technical Specification AS 2728	Inspection Report	V	P	W	W				
	Colour match of batch	To check the colour	Major	Visual	100%	3 Samples per offered lot	Compliance of Sheet colour with Ral No. as Indicated App. Data Sheet & Approved Architectural Drawing	Inspection Report	V	P	W	W				
	Video Jet Printing at an interval of 1.5 to 2 Mtrs. On the sheet Date.	To indicate identification Mark having manufacturer's Name. Date.	Major	Visual	100%	Random for each lot	Presence of designated Identification mark on sheet			P	W	W	To be verified first at coil Mfrgr. Works and second at profiler works with proper correlation			
M/s NANDANI ROOFING SYSTEMS PRIVATE LIMITED				LEGEND D* RECORD IDENTIFIED WITH TICK (V) SHALL BE ESSENTIALLY INCLUDED BY CONTRACTOR IN QA DOCUMENTATION												
MANUFACTURER/ SUB-SUPPLIER		MAIN SUPPLIER Praveen Kumar Pandey				** M : MANUFACTURER /SUB SUPPLIER :C: MAIN CONTRAOR OR IT'S APPOINTED AUTHORITY DULLY APPROVED BY NTPC/PUVNL. N: NTPC P: PERFORMA ; W: WITNESS AND V: VERIFICATION AS APPROPRIATE CHP:NTPC SHALL IDENTIFIED IN COLUMN :N: AS 'W'; THE DOCUMENT SHALL BE READ IN CONIUNCTION WITH NTPC TECHNICAL SPECIFICATION , BOQ AND APPROVED DATA SHEET										
						For NTPC use								DOC No:- 9585-001-315-QVC-Q-002		
														REVIEWED BY	APPROVED BY	APPROVAL SEAL


Digitally signed by Praveen Kumar
Pandey
DN: cn=Praveen Kumar Pandey/
o=BHEL, ou=PSWR,
email=praveen.pandey@bhel.in, c=IN
Date: 2021.08.10 14:50:30 +05'30'

Praveen

ANX II		MANUFACTURERS NAME & ADDRESS				MANUFACTURERS QUALITY PLAN			
		M/s Tata Steel BSL Limited 23, Site IV, Sahibabad Industrial Area Ghaziabad (UP) - 201010		Item: Supply of MS Deck Sheet		QP No. 9585-001-315-QVC-Q-002B		Project : 3x800 MW PVUNL Project Patratu Dist. Rangarh	
		BHEL Approved Supplier (For Profiling) M/s Nandani Roofing Systems Private Limited D-31, Meerut Road Industrial Area, Ghaziabad (UP) - 201001		Job No. 0		Date:09.08.2021		Package: Steam Generator Package Unit-1	
				SUB - SUSTEM :Supply of MS Deck Sheet		REV. 2		Contract no: EMC-511687737343527	
						3		Client: PVUNL	
						PAGE 1 of 3		Main Supplier: BHEL	
Remarks									
A		Coil manufacture from NTPC approved source for PVUNL Patratu Project.							
1		Coil manufacture to furnish undertaking/documentry support for SMP/SP coating along with certificate of compliance to NTPC engineer during inspection at their work.							
2		Samples to be selected and identified by NTPC for testing at any NTPC approved Lab or any 3rd party lab complying ISO/IEC-17025 accrediting by NABL or such accrediting agency and test shall be witnessed by NTPC including verification of calibration status. For long duration / sample conditioning involving long duration may be left to the labs, but the sample shall be handed over to testing labs by NTPC representatives. For salt spray test minimum (3) samples shall be selected from any one lot (may have different batches) & only one to be sent for testing. Salt test report shall be submitted to NTPC for review after completion of testing.							
3		Before raising an inspection call to NTPC, main contractor to confirm the existence of Video Jet printing from coil MFGR.							
4		Videojet printing mentioned at SI no. 12 to be verified by NTPC at Coil manufacturer's work before any check to be carried out. If the videojet printing is not found, no further checks inspection shall be carried out.							
5		Material shall be as per NTPC technical specification							
6		Video Jet printing identification shall be recorded in CHP							
7		BHEL to ensure the same identification of videojet printing in profiled sheet as printed in coil shall be mentioned in COC for proper correlation of material.							
M/s NANDANI ROOFING SYSTEMS PRIVATE LIMITED				LEGEND D* RECORD IDENTIFIED WITH TICK (V) SHALL BE ESSENTIALLY INCLUDED BY CONTRACTOR IN QA DOCUMENTATION		For NTPC use		DOC No:- 9585-001-315-QVC-Q-002	
MANUFACTURER/ SUB-SUPPLIER		Praveen Kumar		** M : MANUFACTURER /SUB SUPPLIER :C: MAIN CONTRAOR OR IT'S APPOINTED AUTHORITY DULLY APPROVED BT NTPC/PVUNL N: NTPC P: PERFORMA ; W: WITNESS AND V: VERIFICATION AS APPROPRIATE CHP:NTPC SHALL IDENTIFIED IN COLUMN ;N: AS "W"; THE DOCUMENT SHALL BE READ IN CONJUNCTION WITH NTPC TECHNICAL SPECIFICATION , BOQ AND APPROVED DATA SHEET					
SIGNATURE		Praveen Kumar Pandey							
						REVIEWED BY		APPROVED BY	
								APPROVAL SEAL	

Digitally signed by Praveen Kumar Pandey
DN: cn=Praveen Kumar Pandey, o=BHEL, ou=PSWR, email=praveen.pandey@bhel.in, c=IN
Date: 2021.08.10 14:50:46 +05'30'

This document to be read along with doc. ref. No. 4540-001-315-QVC-Q-003 and shall meet the technical specification requirements of Talerher-III.

BHEL Approved Supplier (For Profiling)				MANUFACTURING QUALITY PLAN							Project : 2X860 MW NTPC TALCHAR POWER PROJECT UNIT 1 & 2					
M/s Nandani Roofing Systems Private Limited D-31, Meerut Road Industrial Area, Ghaziabad (UP) - 201001				Item : Supply of Deck Sheet		QAP No.: 4540-001-315-QVC-Q-005							Package : EPC Package			
				Sub-system: Supply of Deck Sheet		Rev. No.: R0 R1		Contract No.: CS-4540-001A-2-SC-NOA-7228								
						Date: 05.01.2025 28.01.2025		Main-supplier: BHEL								
						Page: 01 of 01		Sub-supplier : M/S. Nandani Roofing Systems Pvt Ltd								
SL NO	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARK			
Checks to be carried out at Works of the Profiler																
					M	C/N				M	C	N				
1	Receipt of coil	Identification with respect to previous CHP clearance, weight, width and colour	Major	Verification/ weighing	Each Coil	5% random for each lot	Dispatch documents & sealed packing, stamping on coils	Dispatch documents & sealed packing, stamping On coils	Inspection report	✓	P	W	V			
2	Dimensional checks	Dimensions of profiled sheet- length, cover width, straightness, squareness depth of profile, radius and angle of curved sheets, ripple of side laps	Major	Measurement	Each batch	Random for each size/ each colour/each type	As per AD	As per AD	Inspection report	✓	P	W	V	Tolerance as per MCRMA publication (Manufacturing tolerances for profiled metal roof and wall cladding)		
3	Edges and Surface	Surface finish and defects	Critical	Visual	Random for each Profile/length	Random for each Profile/length	No Surface Defect, burrs and peeling of paint on both sides of sheet	No Surface Defect, burrs and peeling of paint on both sides of sheet	Inspection report	✓	P	W	V			
4	Packing	Sturdiness	Minor	Visual	Full lot	Random	As per profiler's standards			✓	P	W	V			
 Pratish Gee Varghese Digitally signed by Pratish Gee Varghese DN: cn=Pratish Gee Varghese, o=Nandani Roofing Systems Private Limited, email=ggv@bhel.in, c=IN Date: 2025.01.28 09:15:03 +05'30'				LEGEND: * Records, identified with "Tick" (✓) SHALL be essentially included by SUPPLIER in QA documentation. ** M- Manufacturer/Sub-SUPPLIER, C: BHEL / approved TPIA, N: NTPC P: perform W: witness and V: verification of document, as applicable. CHP: NTPC shall identify in column "B" AS "W"										DOC.NO: 4540-001-315-QVC-Q-005		
Manufacturer / Sub-supplier				For NTPC use										REVIEW ED BY	APPROV ED BY	APPROVAL SEAL
SIGNATURE																