

Corrigendum 01 against RFQ No: SPKSCPV045 for MMS Columns

Corrigendum is being issued for the mentioned RFQ. Following are the changes with respect to the RFQ Floated.

S.No	Existing	Revised
1	Quantity : 2619 MT	Quantity: 2435 MT
2	Quantity Variation: Nil	Quantity Variation : +/- 15%
3	PQC Clause: 2.3 Vendors shall furnish the solvency certificate issued by nationalized/scheduled banks for minimum worth of Rupees Five (5) crores, with date of issue not before 6 months from tender opening date.	PQC Clause: 2.3 Vendors shall furnish the solvency certificate issued by nationalized/scheduled banks for minimum worth of Rupees four (4) crores, with date of issue not before 6 months from tender opening date.
4	BOM : BOM_GSECL	Revised BOM : BOM_GSECL_Rev01
5	Purchase Specification: PS-439-1300 Rev00	Purchase Specification: PS-439-1300 Rev01
6	Column Drawing :GSECL_MMS-Column_270919	Column Drawing : GSECL_Column_Drg_Rev01
7	No Checklist	Checklist added

Kindly submit the offer accordingly.

REVISED PRE-QUALIFICATION CRITERIA

1 For Fabrication capacity:

Bidder to be a manufacturer and to have in-house cold roll forming facility with minimum capacity of 500MT per month for C or Z or any other profiles all put together. Vendor to provide the capacity proof for any 2 months within the past three years- Sep '16 – Sep '19 showing minimum 500MT each month.

Or

Minimum capacity of 600MT for any 1 month within the past three years Sep '16 – Sep '19.

Calendar months only to be considered for evaluation.

To substantiate above, required documents like delivery challan or tax invoices or any relevant documents to be furnished.

Or

****Chartered engineer certificate certifying minimum capacity of the 600MT per month for fabrication. This certificate should have been issue not earlier than 6 months from the date of tender opening date.**

**** Only those vendors are eligible to submit Chartered Engineer Certificate, whose companies are formed not earlier than 1 year from the date of Tender Opening or they have set up a new cold forming line not earlier than six months from the date of tender opening.**

2 For Hot Dip Galvanization facility:

a.) Either the bidder to have in-house galvanization facility.

Or

b.) Has HDG facility in one of it's subsidiary company.

Or

c.) Has a tie up with another company for HDG Works.

For Sl. No b.) and c.) proper documentation (Stamp paper/Documentation indicating Subsidiary company) to be provided. Once a tie-up is declared during tendering time for HDG works, this tie-up cannot be changed during execution of purchase order.

BHEL reserves the right to visit the vendor's , subsidiary vendor or vendor with whom tie-up is established works and demand all relevant certifications and if found unacceptable, offer is liable for rejection.

3 For Financial Capability.

Vendors shall furnish the solvency certificate issued by nationalized/scheduled banks for minimum worth of Rupees four (4) crores, with date of issue not before 6 months from tender opening date.

BHEL reserves the right to ask any other relevant documents to substantiate the above.

BOM for Columns for GSECL 100 MW RAGHANESDA and 75 MW DHUVARAN

Mark No	Item Description (Dimensions in mm)	Minimum Yield Strength	Galvanization	Lip	Nos for 1 MMS Table	Length/Area	CS Area	Unit Wt	Total wt - Ungalvanized (Approx)	Total wt - galvanized (Approx)	Total wt of 1 Item - Galvanized	No. of MMS Table	Nos of column to be supplied by Vendor	Weight to be supplied by Vendor
COLD FORMED SECTION				mm		mm/mm ²	cm ²	kg/m OR kg/m ²	kg	kg	kg		Nos	MT
	Column													
75 MW Dhuvaran														
CL1	200CS80X2.5	350 MPA	Hot dip galvanized with minimum GSM 610 g/sqm and/or minimum coating thickness of 80 microns for protection against corrosion.Galvanization shall conform to IS-2629, 4759 & 4736 as applicable.	15	10	2676	9.285	7.29	195.05	208.70	20.87	4596	45960	959.00
100 MW Raghanesda														
CL1	200CS80X2.5	350 MPA	Hot dip galvanized with minimum GSM 610 g/sqm and/or minimum coating thickness of 80 microns for protection against corrosion.Galvanization shall conform to IS-2629, 4759 & 4736 as applicable.	15	10	2676	9.285	7.29	195.05	208.70	20.87	7071	70710	1476.00
Total Weight in MT														2435.00

Note:

1. The above sizes are based on preliminary design of MMS which has to be finalised and got approved by the customer, hence a quantity variation of +/- 15 % shall be taken to cater final design requirements.

2. The above sizes are given are based on preliminary design of MMS. Actual fabrication dimesions shall be given along with purchase order and the quantity shall be varied accordingly.

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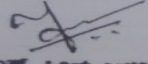
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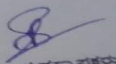
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Technical Specification for
Supply of MMS-Column for
100 MWp Raghanesda and 75 MWp Dhuvaran for GSECL

Revision details :R 01	Prepared	Approved	Date
	NY	PM	15.10.2019


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 N. YASWANTH, SR. ENGINEER/SC & PV-ENGG.
 BHEL-EDN, MYSORE ROAD, BANGALORE - 560 026


 ಪುನಮ್ ಮಿಶ್ರಾ, ಮ್ಯಾನೇಜರ್/ಎಸ್.ಸಿ.ಎಂ.ಎಂ.-ಆರ್.ಪಿ.ಡಿ.
 PUNAM MISHRA, MANAGER/SC&PV-RPD
 BHEL-EDN, MYSORE ROAD, BANGALORE - 560 026

	Technical specification for supply of MMS-Column For 100 MWp Raghnesda and 75 MWp Dhuvaran for GSECL	PS-439-1300
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Acronym Used:

1. MTC = Mill test Certificate.
2. MQP= Material quality plan.
3. OEM=Original Equipment manufacturer.
4. MMS = Module Mounting Structures.
5. PSI= Pre shipment inspection.

1.0 Introduction

Bharat Heavy Electricals Limited (BHEL), Electronics Division, Bangalore is setting up 100 MWp at Raghnesda and 75 MWp at Dhuvaran for GSECL. This document describes the technical specification for MMS-Columns that constitute the solar array of the plant. The total approx. Steel supply for this tender is approx. 2435 MT (+/- 15% Quantity Variation) to be supplied to both Sites.

2.0 Vendor scope of supply

#	Item description	Qty	Fabrication Details
1	Supply of MMS-Column Set as per Bill of Material	2435 MT (+/- 15%)	As per BHEL BOM & drg. Attached in RFQ

3.0 Enclosures to this tender

1. Bill of Material.
2. Tentative Drawing of Column for tender purpose.
3. Typical sample MQP for reference purpose.

4.0 Sub-vendors of steel sheets

Vendor shall procure the raw materials (steel sheets) from OEM sub-vendors viz TISCO, SAIL, JINDAL, RINL. In case of any sub-vendors other than the above, vendor to request the alternate sub vendor, BHEL reserves the right to approve or disapprove the same.

5.0 Fabrication

Fabrication of MMS – Column Set to be as per the drawing furnished by BHEL-EDN with the purchase order.

6.0 Galvanization

The MMS Column Set shall be hot dip galvanized with minimum GSM 610 g/ sqm and/or minimum coating thickness of 80 microns for protection against corrosion. Galvanization shall conform to IS-



	Technical specification for supply of MMS-Column For 100 MWp Raghnesda and 75 MWp Dhuvaran for GSECL	PS-439-1300
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2629, 4759 & 4736 as applicable. Galvanization shall be measured with elcometer or the material can be sent for testing at NABL as and when required. No averaging is allowed for measuring the thickness of galvanization.

7.0 Manufacturing Quality Plan (MQP)

A typical sample of MQP for the MMS-Column is enclosed. Inspection reports to be made with respect to the same. Mass fabrication of MMS-Columns to commence from the date of Manufacturing Clearance from BHEL only.

7.0 Test reports

Every PSI Call should accompany the following reports.

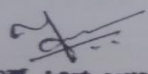
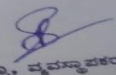
1. MTC.
2. Internal inspection report (Dimensional + galvanization thickness) as per instruction specified in BHEL MQP and BHEL Drawing.
3. Photographs of the offered lot.
4. BHEL- EDN will go through the reports and depute personnel for PSI.
5. PSI to be by BHEL/TPI/Customer

8.0 Packing instructions

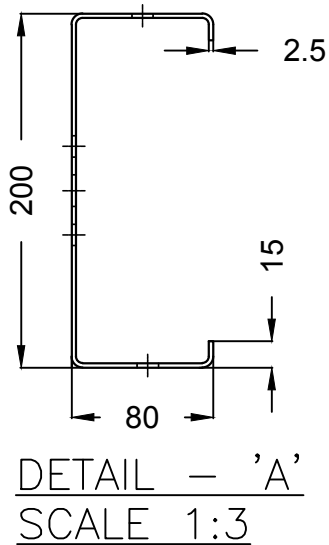
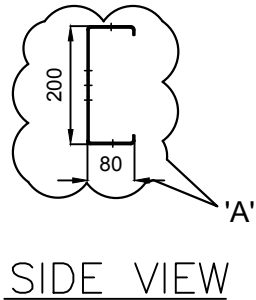
The MMS Column set components shall be packed in bundles with steel straps with corner wedges of plastic/ fibre /rubber material to prevent damage to surface during handling. Adequate no. of steel straps shall be provided depending upon the length of the MMS components and bundles shall be in lots of 50 no.s /100 no.s for easy handling and accounting.

9.0 Marking Instructions:

All MMS-Column Set shall be marked for part identification on 100% basis. As MMS-Columns are being supplied to multiple site hence each column has to mark his vendor initial on each piece with type. Vendor to indicate the initial which he will mark along with the Technical specification to BHEL for approval as multiple vendors should not have same initial.

 ಎನ್. ಯಸವಂತ್, ಸೀನಿಯರ್ ಎಂಜಿನಿಯರ್/ಎಸ್.ಸಿ.ಎಂ.ಎಂ.-ಎಂ.ಇ. ಎನ್. ಯಸವಂತ್, ಸೀನಿಯರ್ ಎಂಜಿನಿಯರ್/ಎಸ್.ಸಿ.ಎಂ.ಎಂ.-ಎಂ.ಇ. N. YASWANTH, SR. ENGINEER/SC & PV-ENGG. BHEL-EDN, MYSORE ROAD, BANGALORE - 560 026	 ಪುನಮ್ ಮಿಶ್ರಾ, ಪ್ರಬಂಧಕ/ಎಸ್.ಸಿ.ಎಂ.ಎಂ.-ಎಂ.ಇ. ಪುನಮ್ ಮಿಶ್ರಾ, ಪ್ರಬಂಧಕ/ಎಸ್.ಸಿ.ಎಂ.ಎಂ.-ಎಂ.ಇ. PUNAM MISHRA, MANAGER/SC&PV-RPD BHEL-EDN, MYSORE ROAD, BANGALORE - 560 026
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DRG. No.



1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. HOLE SIZES ARE SHOWN AFTER GALVANIZATION.
3. REMOVE ALL BURRS AND SHARP EDGES.
4. THE ITEM TO BE MARKED AS "VENDOR NAME - ITEM"

REV.	DATE	ALTERED	REV.	DATE	ALTERED	DRAWN	NAME	SIGN	DATE	
		CHECKED			CHECKED					
		APPROVED			APPROVED					
						CHECKED				
						APPROVED				
						DISTRIBUTION OF PRINTS				



PROJECT TITLE : 100MWp & 75MWp SOLAR POWER PROJECT

CLIENT : GSECL

CONSULTANT:

BHARAT HEAVY ELECTRICALS LIMITED.
ELECTRONICS DIVISION, BANGALORE

TITLE:

COLUMN-CL1

No. OF SHEETS	01
SHEET No.	01
REV	01

BHEL DRG. No.

Checklist of documents uploaded while submitting bids for RFQ No: SPKSCPV045

1. Signed BOM : Yes/No
2. Signed Specification : Yes/No
3. Solvency Certificate from nationalized/Scheduled Banks : Yes/No
4. Chartered Engineer Certificate, if applicable : Yes/No
5. Documentary Proof of Hot Dip Galvanization facility : Yes/No
6. Documentary Proof of Fabrication Capacity* : Yes/No

* Summary sheet as per format given below has to be submitted along with Invoices or Delivery

Challan or any other related documents as per PQC.

S.NO	Invoice/DC No	Invoice/DC Date	Invoice/DC Month	Unit of Measurement	Quantity
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**Revised Quantity distribution for RFQ SPKSCPV045 for MMS Columns
for 100 MWp Solar PV Power plant, Raghanesda and 75MWp Solar PV
Power Plant, Dhuvran for GSECL.**

Total quantity 2435 Tonnes to be split into 3 vendors as detailed below:

100MW Raghanesda – 1496 Tonnes

75 MW Dhuvran – 959 Tonnes

Splitting as below (Quantity in Tonnes) :

Sl no.	Project	Total	L-1	L-2	L-3
1	100 MW Raghanesda	1496	748	448.8	299.2
2	75MW Dhuvran	959	479.5	287.7	191.8

Any changes in splitting ratio based on the MSE act /Make in India policy or due to any other reason, intimation will be given only to the vendors who have participated in this tender, hence it is mandatory that vendors should participate in the tender.