

**Cable Glands**  
**Technical Specification**

ANNEXURE-5

**TECHNICAL SPECIFICATION FOR CABLE GLAND**

**SPECIFIC TECHNICAL REQUIREMENT**

For exact measurements, supplier should contact site for cable samples. The final supply shall be made based on actual cables supplied at site. The make of the cable glands shall be as per customer approved vendor list.

**Cable Gland Type CGNC** – The cable glands shall be heavy duty, double compression type. It shall be made of brass, duly electro tinned in order to avoid corrosion and oxidation of the surface. (electro-tin coating thickness not be less than 10 microns) The glands shall provide neat, tight, dust and vermin proof termination. The glands shall be provided with rubber ring to hold the cables firmly when check-nut is slightly tightened. The gland shall be complete with suitable washers etc. The cable glands shall be tested as per BS: 6121. Rubber components used in cable glands shall be neoprene and of tested quality. The glands shall be dust proof, screw on type, shrouded complete with necessary armour clamp and tapered washers etc.

**QUANTITY**

S.N.	Cable Size	Main Quantity (in Nos)
1	2cX2.5 Sqmm HR PVC Cu Control Cable	20
2	4cX4 Sqmm HR PVC Cu Control Cable	85
3	4cX6 Sqmm HR PVC Cu Control Cable	140
4	5cX2.5 Sqmm HR PVC Cu Control Cable	350
5	7cX2.5 Sqmm HR PVC Cu Control Cable	100
6	10cX2.5 Sqmm HR PVC Cu Control Cable	250
7	14cX2.5 Sqmm HR PVC Cu Control Cable	700
8	19cX2.5 Sqmm HR PVC Cu Control Cable	210
9	2cX6 Sqmm HR PVC Al Power Cable	264
10	4cX6 Sqmm HR PVC Al Power Cable	18

<b>S.N.</b>	<b>Cable Size</b>	<b>Main Quantity (in Nos)</b>
11	4cX16 Sqmm HR PVC Al Power Cable	50
12	3.5cX35 Sqmm HR PVC Al Power Cable	30
13	3.5cX70 Sqmm HR PVC Al Power Cable	8
14	1cX150 Sqmm HR PVC Al Power Cable	78
15	1cX630 Sqmm HR PVC Al Power Cable	8
16	3.5cX300 Sqmm HR PVC Al Power Cable	2

Please note the actual cable gland quantity shall be final cable schedule.

20% of the final supplied cable gland quantity shall be handed over to BHEL/Customer.

### **TEST**

All valid test reports as per relevant standard shall be furnished including Proof Torque Test, Tensile Test, Seal Test and Electrical Continuity Test as per BS 6121. Cable glands shall also be tested for dust proof and weather-proof termination. These reports should have been conducted on identical / similar equipment to those offered. In case valid tests are not furnished, the tests shall be conducted free of charge. No separate test charges shall be paid.

A	HCM	SKG	SKG	09-08-10	Revised / Added vendor's list for items e.g., Hydro Generator / Motor, Control & Monitoring, Excitation, Mechanical Workshop, Elevator etc.
Rev	By	Chkd	Apprvd	Date	Description

Client



N H P C LIMITED

KISHANGANGA CONSORTIUM

HCC

Halcrow

o/c  
Submitted to  
Halcrow on  
09.08.10  
D. S.

Subcontractor



Project

KISHANGANGA HYDROELECTRIC PROJECT  
330 MW

Drawing Title

ELECTRO MECHANICAL PLANT & MACHINERY  
SUB VENDOR LIST

Drawn : PB

Date: 30-06-10

Checked : PB

Date: 30-06-10

Approved by: PB

Date: 30-06-10

HCC Drawing No.

KG-EM-000-LS-001

Subcontractor Drawing No.

Revision

A

Drawing Scale : NA

Sh. / No. of Sh. : 1/40



## **BHARAT HEAVY ELECTRICALS LIMITED, BHOPAL**

### **VENDOR LIST**

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**PROJECT : 3 X 110 MW KISHANGANGA H.E. PROJECT**

**CLIENT : NHPC LTD.**

**CONTRACTOR : HINDUSTAN CONSTRUCTION COMPANY LTD. ( HCC )**

**NAME OF EQUIPMENT : INDOOR SWITCHGEAR ITEMS**

**VENDOR LIST NO.:QAQC/SCR/SWGR/VL/KISHANGANGA/01 REV.NO.: 01 DATE: 23.04.10**

<b>Sl. No.</b>	<b>Description</b>	<b>Established Supplier / Vendor</b>	<b>Dealer / Local Agent</b>
11.	Control / Selector Switches	Kaycee Industries Ltd., Mumbai L & T Salzer, Coimbatore	Elect.Appl., Bhopal GEC, Bhopal
12.	Surge Suppressors ( CR Type )	Yasha Electricals Pvt. Ltd., Baroda Magnewin Magnetics, Sangli	
13.	Surge Suppressors ( ZnO.Type )	Raychem Obium Electrical Industries (P) Ltd., Hyderabad Elpro International Ltd., Pune	GEC, Bhopal L.B.Enterprises
14.	Power Cable Lug & Gland	Dowells Electromac Industries, Mumbai Comet Brass Products, Mumbai Chetna Engineering Co., Nasik Jainson Braco Electricals (India) Pvt.Ltd., Mumbai	Bora Brothers, Bpl. QA, Bhopal QA, Bhopal
15.	Bus Transformer Panels ( Numerical )	Aartech Solonics Ltd., Bhopal Easun Reyrolle Limited., Hosur Asea Brown Boveri Ltd., Vadodara	
16.	Vacuum Contactor	Crompton Greaves Ltd. Jyoti Ltd. Siemens Ltd. ABB	
17.	Multifunction Meter	Elster Schneider Electric Conserve I P Ltd Rishabh, Nasik SEMS, Udaipur	Elect.Appl., Bhopal Elect.Appl., Bhopal GEC, Bhopal AGECO, Bhopal

  
**P. K. CHATAP**  
Manager (QC)  
Quality Control-SCR  
BHEL, BHOPAL

**( P.K.Chatap )**  
**Manager ( QA-SCR )**

**Note :** This Vendor List Has Been Prepared Exactly In Line With Our Latest  
PMD Ref: MM/SCR/ASW03/REV 06.

		Ravin Cables Ltd Pune Maharashtra	INDIA
		Rpg Cables Ltd Thane Maharashtra	INDIA
		Scot Innovation Wires & Cables Pvt.Ltd. Solan Himachal Pradesh	INDIA
		Skytone Electricals ( India) Limited Faridabad Haryana	INDIA
		Suyog Electricals Ltd Panchmahal Gujarat	INDIA
		Torrent Cables Ltd Nadiad Gujarat	INDIA
		Universal Cables Ltd Satna Madhya Pradesh	INDIA
6	<b>CABLE GLANDS &amp; ACCESSORIES</b>	Central Hardware Industries Vadodara Gujarat	INDIA
		Comet Industries Mumbai Maharashtra	INDIA
		Electromac Industries Mumbai Maharashtra	INDIA
		Standard Metal Industries Mumbai Maharashtra	INDIA
		Sunil & Company Pvt Ltd Kolkata West Bengal	INDIA
7	<b>CABLE TERMINATION KIT</b>	3M Electro & Communication India Pvt Ltd Pune Maharashtra	INDIA
		Hari Consolidated Pvt Ltd New Delhi Delhi	INDIA
		Raychem Rpg Ltd Thane Maharashtra	INDIA
		Yamuna Power And Infrastructure Limited Jagadhari Haryana	INDIA
8	<b>CIRCUIT BREAKER</b>	Areva Chennai Tamil Nadu	INDIA
		Asea Brown Boveri Vadodara Gujarat	INDIA
		Crompton Greaves Ltd Nashik Maharashtra	INDIA
		Kirloskar Electric Co Ltd Mysore Karnataka	INDIA
		Siemens Ltd Aurangabad Maharashtra	INDIA
9	<b>CLAMPS &amp; CONNECTORS</b>	Deccan Engineering Works Bangalore Karnataka	INDIA
		International Transmission Products Pvt Ltd Mumbai Maharashtra	INDIA
		Klemmen Engineering Corporation Chennai Tamil Nadu [MSME]	INDIA