

# **ANNEXURE-I for HMC**

## **PROJECT: KISHANGANGA HEP (3 x 100 MW)**

(1) QUANTITY: 3 Nos.

## (2) TYPE OF GOVERNOR: PELTON

### (3) DRAWINGS:

- (a) Hydro Mechanical Scheme for Deflector control Drg. No.: 02000018501 Rev. 01 (enclosed)
- (b) Installation of HMC Drg. No. 02085018501 Rev.02 (enclosed)
- (c) Wiring Diagram of Deflector Hydro Mechanical Cabinet Drg. No. : 32083918501 rev.01 will be submitted after placement of P.O. to successful bidder.
- (d) Pedestal Drg. No. : 12085049000 (already available with all the vendors)
- (e) Port Size: Var. No. 07 of Drg. No. 32083649049 REV. 03 (2 Ports)
- (f) Modified Sub plate drawing No. 32083949233 Rev.01 for mounting Auto Manual solenoid valve enclosed.

### (6) METERING INDICATION

#### (6.1.1) Tachometer

- (a) Input range: 4-20 mA
- (6.1.2) Balance Indicator
  - (a)Input range: (-) 5.5 0 (+) 5.5 VDC
- (6.1.3) Speed Setting Indicator
  - (b) Input range: 4-20 mA
- (6.1.4) Output Setting Indicator
  - (c) Input range: 4-20 mA
- Make : Meco/Rishabh
- (6.2) Mechanical Meter: Deflector position/Limiter indicator dial graduation marking is 250<sup>°</sup> for 0-100% indication

(6.2.2)Pressure Gauge: **Range:** 0 - 100 Kg/cm<sup>2</sup> Make: Wika /Budenberge /Forbes Marshal /Ashcraft /Toshniwal



## (7) <u>Painting:-</u>

- A. Two coats of finish paint for external surface of cabinet and casting shall be of shade No. RAL 1013 Pearl White.
- (16) Following particulars to be punched on the rating plate Drg. No. 12083749020 Item No. 1 by the supplier before dispatch of the HMC.
  - (a) Type of Turbine: Pelton
  - **(b) System Pressure:** 60 Kg/Cm<sup>2</sup>
  - (c) W.O. No. : Unit-I : 39003P22409 Unit-II : 39004P22409 Unit-III : 39005P22409

Station DC Supply: 220 V DC

# **Special Feature:**

1. **Duplex Filter** – This filter should be designed for max. operating pressure of 70 kg/cm<sup>2</sup>, flow 30 LPM and filtration rate 10 microns with visual and electrical clogging indicator 1 NO + 1 NC potential free contact at pressure differential of 4.5 Kg/cm<sup>2</sup> and filter pressure drop should not be more than 0.5 Kg/cm<sup>2</sup>. This filter shall be in supplier scope of supply. The filter collapsibility shall not be less than 30 kg/ cm<sup>2</sup> differential.

## Make: <u>HYDAC / REXROTH</u>