

[illegible]

Purchase Order from BTPS for HQ									
1	BTPS	Procurement of Micro controller card set and compressor for Blue Star make (Electrical Operated) screw chiller at Centralized AC Chiller system of BTPS A (1*500MW).	M/S SAI CONSTRUCTI ON	Single(OES,OEM)	There are altogether Two (02) nos. of Screw chiller units for power house and Two (02) nos. of Screw chiller units for technical building installed at central air conditioning plant of BTPS “A” DVC and Each chiller units consists of Two (02) nos. of compressors. These screw chillers are in Continuous operation for maintaining the desired temperature required for optimizing the performance of various Electronics cards/PLC panels at the various locations of BTPS “A” such as BTG control room, UPS, Battery Charger, ESP & VFD control room and Technical Buildings. Breakdown of Central AC plant may cause the failure of Electrical, Max DNA system, instrumentation system which results spurious tripping of the system as well as generation loss. Therefore, spare compressor for power house chiller and as two micro controller card are working under repaired condition and needs urgent replacement. So, three numbers (one number to be kept as spare) micro controller card sets of Screw chillers are essential for Uninterrupted operation of the chillers of Central Air Conditioning Plants. Considering the above, it is proposed to procure the spare compressor for power house chiller and micro controller card sets for power house and technical building chillers from OES for one to one fitment and better technical suitability. Items are mentioned in OEM/OES list issued by ED(C&M) vide no DVC/Head Quarter/CMM/861 dated 04.11.2022. Hence proposed to procure indented items on OES i.e M/s Bluestar Limited.	GEMC-511687706755591 (DVC/Contract/Head Quarter/ES-II A/CMM/Supply/00005/ Capital) Dated 02/02/2024	3108812.80	2.3(i) of DFP C&M.	---

2	BTPS	Procurement of Steel Material from M/S Sail for DVC BTPS on Single (PSU) basis.	SAIL BOKARO STEEL PLANT	Single(PSU)	Based on requirement of Boiler & Aux, TG & Aux, CHP & AHP section of BTPS, procurement action for Steel materials has been initiated. The items indented for procurement will be utilized during the proposed overhauling of DVC BTPS-A (1X500 MW) and in day to maintenance work of Coal mill, dozers, Conveyor gallery, Coal feeding Chutes, Bunker gratings, ash slurry pipelines and erection of platform wherever required. The quantity of the indented steel materials has been prepared as per the minimum order quantity of SAIL and necessary demand clarification has been provided by Boiler & Aux, TG & Aux, CHP & AHP section of BTPS. Also SAIL has categorically denied supplying steel materials less than per the minimum order quantity. So, It is proposed to Procure the aforesaid items on single source basis from M/S SAIL, Bokaro.	[(GEMC-511687772938723 Date: 01-02-2024) / (DVC/Contract/Head Quarter/MPC A/CMM/Supply/00002)] Dated 01/02/2024	8304000.00	2.3(ii) of DFP C&M	---
3	BTPS	Procurement of siemens make smart positioner for 1X500 MW, BTPS	MSA instruments	Single(OES,OEM)	Siemens make single acting smart positioner has been used in different actuators for different purpose, like Super heater spary, Reheater Spray, HP Heater drip, LP Heater Drip, HFO heating. All these actuators are very important to operate from remote desk and necessary to be kept in auto mode for smooth plant operation, for that used positioner should be operated properly. In view of that installed positioners are needed to be in stock to reduce downtime. Proper operation of actuator ensures maintaining proper steam temperature as well as improve heater efficiency. These items are also listed in capital items & OEM/OES issued from HQ.	GEMC-511687771115967 Generated Date : 09-Feb-2024,DVC/Contract/Head Quarter/C&I A/CMM/Supply/00005 Dated 10/02/2024	635920.00	2.3(i) of DFP C&M	---

4	BTPS	Procurement of Main Turbine governing system supply rack duplex Filter element, Make-BOLL & KIRCH, installed in BTPS-1X500 MW Unit.	M/s SBTC TECH SOLUTIONS	Single(OES,OEM)	Duplex filter installed in supply rack of main turbine governing system of BTPS-1X500 MW Unit is very much critical for healthy functioning governing system by ensuring supply of filtered oil to servomotors of HP & IP Turbine control valves consequently the smooth running of unit. As such, it is being intended to procure Spare elements of filter to keep minimum inventory and also to use it as per requirement in case any replacement is mandated by chocking of installed filter elements. Considering the above facts, it is intended to procure spare filter elements from BOLL & KIRCH, the OEM.	Contract No: GEMC-511687724839233 Generated Date : 08-Feb-2024,DVC/Contract/Head Quarter/TG A/CMM/Supply/00009 Dated 09/02/2024	1107312.00	2.3(i) of DFP C&M	---
5	BTPS	Procurement of Miscellaneous Critical spares for Capital Overhauling of BTPS-1X500MW unit proposed in 2024	M/s BHEL, PSER	Single(OES,OEM)	As per overhauling rolling plan of BTPS 500 MW, Items being indented for procurement are critical in nature and are required for the proposed capital overhauling of the unit. As such, considering the above facts, we are intending to spare for Capital Overhauling and Recommended Critical spares for Main Turbine. The indented item was not procured earlier and is being procured for the first time considering the criticality as stated. Items are also listed in OEM/OES issued from head quarter.	[(GEMC-511687741884992Date; 10/02/2024) / (DVC/Contract/Head Quarter/TG A/CMM/Supply/00010)] Dated 13/02/2024	3115288.46	2.3(i) of DFP C&M	---

6	BTPS	Spares for EOT Crane -115/30 TON, Double Girder, Span 32.4 Mtr, Model-1988, Make- Anupam Industries Ltd. Installed at BTPS 1X500 MW Unit	INDIAN INDUSTRIAL EQUIPMENTS	Single(OES,OEM)	One (01) no. EOT crane of capacity - 115/30 Ton, Double girder, Span -32.4 Mtrs is installed in Main powerhouse TG building of Bokaro1x500 MW Unit. This crane consists of Two hoists, one is Auxiliary hoist of capacity 30 Ton, and another Main hoist of capacity 115 Ton. The crane is used for day-to-day handling and shifting of materials from Turbine floor (17 mtr) to unloading bay and during routine maintenance and overhauling of equipment's. As such, due to frequent use of crane, all mechanical parts are wearing up and requires proactive maintenance. Further, as per overhauling rolling plan, Bokaro-1x500 MW unit is scheduled for Capital Overhauling in 2024 during which heavy parts of Turbine shall be dismantled and placed on designated location with the help of EOT crane. So, any unforeseen breakdown of EOT crane shall not only increase the overhauling completion period but also will jeopardize the equipment safety during handling & shifting. Hence, EOT Crane is to be always kept readily available to decrease the downtime of Overhauling and breakdown maintenance works. As such, spares required for ensuring the healthiness of EOT crane has been identified and is being proposed for procurement. Indented items are included in the list of OEM/OES.	GEMC-511687741378326 (DVC/Contract/Head Quarter/TG A/CMM/Supply/00011) Dated 13/02/2024	4683774.00	2.3(i) of DFP C&M.	---
---	------	--	------------------------------	-----------------	---	---	------------	--------------------	-----

7	BTPS	Procurement of Complete Bowl Assembly for Raw water, Ash water, CT Make-up & Complete Thrust Stand Assy. of ACW Pump of BTPS(1X500MW)	FLUID TECH AGENCIES	Single(OES,OEM)	<p>In the Intake Pump house, there are three numbers of RAW Water pumps (A, B, C) &amp; three numbers of ASH Water pumps (A, B, C). Raw water pumps discharge the river water to the clarifloculator through the aerator and finally, clear water to the clear water tank in the water treatment plant and this clear water is supplied for the NDCT basin as makeup water by CT MAKEUP PUMP. There are two no. of CTMUP pumps (A, B) in the water treatment plant, due to evaporation loss in the natural draft cooling tower these pumps supply make-up water to NDCT Basin almost continuously by running one pump and one in standby. Also, this clear water is used for the fire pump house storage tank, that water is used in the fire line system or in the emulsifier system which is very critical. There are two (02) nos. of CT MAKEUP PUMP in the water treatment plant of BTPS(1X500MW). CTMUP supplies clear water to NDCT Basin. These pumps are critical in nature as their poor discharge may hamper the CT basin level in the CW pump house. Ultimately, impact on TG/Boiler side auxiliary cooling water system and condenser vacuum. Also, the Intake pump house of BTPS 1X500MW is having three (03) nos. of Ash water pumps that supply ash water to Ash Plant, almost on a regular basis for makeup water in the ash sump. These pumps handle direct river water due to this wear &amp; tear, which requires routine overhauling/checking as and when the problem comes. There are two nos. of ACW Pumps -Size-35H; Stage-1; Capacity:3650 M3/Hr; Total head:42.2 Mtr; RPM:991 Make: M/s Flowmore Ltd. for BTPS(1X500MW) installed at CW pump house, out of which one no. of ACW pump running continuously to maintain the temperature of cooling water for auxiliary equipment's of TG &amp; Boiler side through heat exchangers which in turn aims in stable running of different auxiliaries to sustain steady generation of the unit. An outage of this equipment has a direct impact on the generation of the unit. Moreover, it is necessary to maintain some minimum stock of critical spares to meet any eventuality. Therefore, taking into consideration as mentioned above, it is proposed to go for procurement of such capital items on a single (OES, OEM) basis from M/s FLOWMORE LIMITED.</p>	Contract No: GEMC-511687728367823 Generated Date : 19-Feb-2024,DVC/Contract/Head Quarter/MS-II A/CMM/Supply/00002/ Capital Dated 20/02/2024	14852543.80	2.3(i) of DFP C&M	---
---	------	---	---------------------	-----------------	---	--	-------------	-------------------	-----

8	BTPS	Procurement of Spares for Fire Detection System & alarm system microprocessor based, Inert Gas & ASD System of M/s Honeywell make installed in DVC,BTPS.	M/s STARLIGHT TECHNOLOGIES PRIVATE LIMITED	Single(OES,OEM)	The M/s Honeywell makeFire Detection System, Inert Gas & ASD System is being installed at different locations in BTPS. The Fire Detection System & alarm system, Inert Gas & ASD System had been supplied erected and commissioned under EPC Contract and are in service since commissioning in different location/packages that includes Main Powerhouse, Ash Handling Plant, Water Package (DM Plant as well as PT Plant), CHP Package and administrative Building (newly constructed) of BTPS. The Fire detectors were installed to detect one or more of the three characteristics of fire-smoke, heat, and flame by means of smoke detector, heat detectors and LHS Cables. During a fire the importance of activation of the occupants through alarm or bell is very well required likewise actuation of spray/hydrant system. The Fire Detection system is not only helpful in prevention of fire hazards but also provide comprehensive security for any type of fire accident. And also the said system helps in not compromising with Fire safety of individual as well as equipment's & offices too . Any breakdown in Fire Detection System, Inert Gas & ASD System has directly impacts Plant Generation as well as damage of plant property. At present no spares are supplied against this System to BTPS-A. So, it is felt prudent to procure Spares for these Fire detection System installed in BTPS-A (1X500MW) on OEM Basis (i.e./s Honeywell), to minimize equipment downtime as well as for smooth functioning of the system.	GEMC-511687714386103 (DVC/Contract/Head Quarter/C&I A/CMM/Supply/00004) Dated 13/02/2024	1415928.00	2.3(i) of DFP C&M	---
---	------	--	--	-----------------	---	--	------------	-------------------	-----

9	BTPS	Spares for Main Plant Compressor, Model: ZR 275 & Dryer Model: MD 600, make : Atlas Copco India Ltd, installed in BTPS:1X500 MW Unit.	Atlas Copco(India) Limited	Single(OES,OEM)	Instrument and service air compressors & dryers, total four nos., two nos. each respectively are installed in BTPS 500MW unit. It ensures the moisture free quality air supply to all pneumatic instruments of the plant as well as for other services related to maintenance works. The healthiness and availability of the compressors is very critical as otherwise any unexpected breakdown of any of the standby compressor unit may result in constraining the operation of unit. As such, recommended Spares are required to be kept readily available at site to mitigate any exigency which would in case jeopardize the unit availability. As per last ARC visit by the OEM, recommended spares required for servicing/overhauling of the compressors & Dryers for next ARC visit has been sought out These spares are proprietary items of the OEM and are made exclusively as per design requirement of the unit. Considering the necessity as per above, it is being intended to procure spares of required quantity as per recommendation of the OEM, ACIL, which is necessary for servicing after lapse of schedule running hours of operation for each compressor and Dryer.	GEMC-511687769076899 and DVC/Contract/Head Quarter/TG A/CMM/Supply/00012 Dated 22/02/2024	2201514.20	2.3(i) of DFP C&M.	---
10	BTPS	Procurement of Spares for TDBFP Oil centrifuge-16000 HRS Kit, Model : OTC 5-91-067, Make- GEA Westfalia Separator India Pvt. Ltd.	RKB INTERNATIONAL PRIVATE LIMITED	Single(OES,OEM)	Two (02) nos. Oil centrifuge, model- OTC 5-91-067 is installed in TDBFP Lubrication oil system at BTPS-1X500 MW unit. TDBFP set Lubrication oil is subjected to stringent requirements in terms of purity, since the components which come into contact with that oil can be adversely affected by solid or liquid contaminants. The function of oil centrifuge, which can be kept in continual operation independently of the operating oil systems, is to either maintain or restore the purity of the turbine oil. Hence, it is vital to ensure the availability of the centrifuge for smooth running of TDBFP set which is directly linked with unit generation. As such, considering the above facts, spares of required quantity has been identified and is being proposed for procurement. Proposed quantity of spares is required for overhauling/servicing of oil centrifuge for TDBFP # A & B and available spares which were procured earlier have been consumed after 16000 hrs completion of Both centrifuges. Now, present stock of item is nil. These spares are required for next periodic servicing of 16000 running hours as per service report by the OEM.	GEMC-511687773586396 and DVC/Contract/Head Quarter/TG A/CMM/Supply/00013 Dated 24/02/2024	474604.00	2.3(i) of DFP C&M	



## WORK ORDERS

[illegible]



















