

Note:
Note

| Particulars of bidder/ authorised representative |  |  |  |  |
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|  |  |  |  |  |
| Name |  |  |  |  |


| ANNEXURE-I <br>  <br> LIST OF MANDTORY SPARES |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| NAME OF PROJECT: | 1 X 660 MW WBPDCL SAGARDIGHI EXTN UNIT V |  |  |  |  |  |
| NAME OF PACKAGE: | DOUBLE GIRDER EOT CRANES (>100T CAPACITY) |  |  |  |  |  |
| TECHNICAL SPECIFICATION: | PE-TS-445-501-A001 |  |  |  |  |  |


| SI No.* | Description of the Equipment/ Package Name | Quantity to be supplied for the Package | Total Ex-Works Price (INR) |
| :---: | :---: | :---: | :---: |
| 6.01 .00 | EOT Cranes |  |  |
| 6.01 .01 | Long Travel Unit |  |  |
| (i) | Set of Bearings of Wheels | 1Set for each type \& capacity of EOT |  |
| (ii) | Set of Gearbox Bearings with Sleeves | 1Set for each type \& capacity of EOT |  |
| (iii) | Long Travel end Shaft Bearings | 1 Set for each type \& capacity of EOT |  |
| (iv) | Seals for Travel Gear Box | 1 Set for each type \& capacity of EOT |  |
| (v) | Long Travel Brake Shoes Liners | 2Sets for each type \& capacity of EOT |  |
| (vi) | $\qquad$ | 1 No. for each type \& capacity of EOT |  |
| (vii) | Brake Spring | 1 Set for each type \& capacity of EOT |  |
| (viii) | Brake Coil | 2Sets for each type \& capacity of EOT |  |
| (ix) | M otor | 1 No. for each type \& capacity of EOT |  |
| 6.01 .02 | Cross Travel Unit |  |  |
| (i) | Axle Bearings | 1 Set for each type \& capacity of EOT |  |
| (ii) | Set of Gearbox Bearings with Sleeves | 1 Set for each type \& capacity of EOT |  |
| (iii) | Set of seals for Gearbox | 1 Set for each type \& capacity of EOT |  |
| (iv) | Cross Travel end Shaft Bearing | 1 Set for each type \& capacity of EOT |  |
| (v) | Cross travel Brake Shoes Liners | 2 Sets for each type \& capacity of EOT |  |
| (vi) | Complete Set of Hydraulic Thruster for Brakes (if applicable) | 1 No. for each type \& capacity of EOT |  |
| (vii) | Brake Spring | 1Set for each type \& capacity of EOT |  |
| (viii) | Brake Coil | 2Sets for each type \& capacity of EOT |  |
| (ix) | Motor | 1 No. for each type \& capacity of EOT |  |
| 6.01 .03 | Hoist |  |  |
| (i) | M ain Hoist Pulley Bearings [All Bearings of Each Type and size used in all Gear Assemblies, Lifting Hook, Trolley wheels etc.] | 1 Set for each type \& capacity of EOT |  |
| (ii) | Set of Bearings for Gear box | 1 Set for each type \& capacity of EOT |  |
| (iii) | Set of seals for Gearbox | 1 Set for each type \& capacity of EOT |  |
| (iv) | Aux. Hoist Gearbox Bearings | 1 Set for each type \& capacity of EOT |  |
| (v) | Aux. Hoist Gearbox Seals | 1 Set for each type \& capacity of EOT |  |
| (vi) | Complete Set of Hydraulic Thruster for Brakes (if applicable) | 1 No. for each type \& capacity of EOT |  |
| (vii) | M ain \& Aux. Hoist Brake Shoes [Brake shoes with lining for each size of brake (Pair of each size)] | 2 Sets for each type \& capacity of EOT |  |
| (viii) | M ain \& Aux. Hoist Brake Springs | 2 Sets for each type \& capacity of EOT |  |
| (ix) | M ain \& Aux. Hoist Brake shoe liners | 2 Sets for each type \& capacity of EOT |  |
| (x) | M otor for M ain Hoist \& Auxiliary Hoist | 1 No. for each type \& capacity of EOT |  |
| (xi) | Brake Coil | 2 Sets for each type \& capacity of EOT |  |
| (xii) | Wire Rope for Aux. Hook | $100 \%$ of one crane for each type \& capacity of EOT |  |
| 6.01 .04 | Electrical |  |  |
| (i) | Other Electrical Spares as applicable as per the Electrical List | Applicable Item \& Quantity same as indicated in Electrical list 'B' SI. no.7.08.00, 7.21.00. |  |
| (ii) | Limit Switches for: |  |  |
| (a) | M ain Hoist | 1 Set for each type \& capacity of EOT |  |
| (b) | Aux. Hoist | 1 Set for each type \& capacity of EOT |  |
| (c) | Cross Travel | 1 Set for each type \& capacity of EOT |  |
| (d) | Long Travel | 1 Set for each type \& capacity of EOT |  |
| (iii) | M aster Controller for : |  |  |
| (a) | Aux. Hoist | 1 No. for each type \& capacity of EOT |  |
| (b) | Cross Travel | 1 No. for each type \& capacity of EOT |  |
| (c) | Long Travel | 1 No. for each type \& capacity of EOT |  |
| (iv) | VVVF Drive Complete Set for: |  |  |
| (a) | M ain Hoist | 1 No. for each type \& capacity of EOT |  |
| (b) | Aux. Hoist | 1 No. for each type \& capacity of EOT |  |
| (c) | Cross Travel | 1 No. for each type \& capacity of EOT |  |
| (d) | Long Travel | 1 No. for each type \& capacity of EOT |  |
| 7.00 .00 | Electrical Items |  |  |
| 7.08.00 | 415V System |  |  |
| 7.08.01 | 11/0.415KV Transformer ( for Each make,type and rating of Transformer) |  |  |
| (i) | Door Limit Switch complete set | 1 set (1 set means total requirement for one Transformer) |  |
| (ii) | Neutral CT | 1 no of each type and rating |  |
| (iii) | Temperature scanner | 1 no. |  |
| (iv) | bhy | 3 No |  |


| (v) | LV Bushing with metal parts, connectors and gaskets | 3 No |  |
| :---: | :---: | :---: | :---: |
| (vi) | LV neutral Bushing with metal parts, connectors and gaskets | 1 No |  |
| (vii) | Post Insulator | 1 set (1 set means total requirement for one Transformer) |  |
| (viii) | Limb of complete LT \& HT of temperature sensing devices | 1 Set (1 set means total requirement for one Transformer) |  |
| 7.08.02 | 415V Air Circuit Breaker (for Each make, type and rating of $A C B$ ) |  |  |
| (i) | Trip Coil | $20 \%$ of total nos. or minimum 5 nos whichever is higher for each type and rating used in each switchgear (PCC/PMCC/MCC/ACDB) |  |
| (ii) | Closing Coil | $20 \%$ of total nos. or minimum 5 nos whichever is higher for each type and rating used in each switchgear (PCC/PMCC/MCC/ACDB) |  |
| (iii) | Spring Charging Motor | 2 nos. |  |
| (iv) | Spring Charging Motor with complete Mechanism | 2 nos. |  |
| (v) | Spring Charged Limit Switch | 5 nos. |  |
| (vi) | Thermal Overload for Spring Charging Motor | 2 nos. |  |
| (vii) | Main Contact (Fixed and moving) assembly | 5 sets (1 set consists of 3 nos.) for each type and rating |  |
| (viii) | Arcing Contact (Fixed and moving) assembly | 5 sets (1 set consists of 3 nos.) for each type and rating |  |
| (ix) | Breaker Jaw Contact ( Bus-end \& Breaker- end) assembly | 5 sets (1 set consists of 3 nos.) for each type and rating |  |
| (x) | Sliding Contact (Fixed \& Moving) | 3 sets. |  |
| (xi) | Breaker Auxiliary Contact Block | 5 nos. |  |
| (xii) | Arcing Chute | 2 sets (1 set consists of 3 nos.) for each type and rating |  |
| (xiii) | Plug Socket with Prefab cable | 3 nos |  |
| (xiv) | Position Limit Switch | 5 sets |  |
| 7.08.03 | 415V PCC, PMCC, MCC, ACDB, DCDB, Elect. Control Panel (For each PCC, PMCC, MCC, ACDB, DCDB and Elect. Control Panel ) ( applicable items of PCC, PMCC, MCC, ACDB, DCDB and Elect. Control Panel shall be considered) |  |  |
| (i) | Indicating Lamps complete assembly |  |  |
| (a) | Red | 3 nos of each make and type. |  |
| (b) | Blue | 3 nos of each make and type. |  |
| (c) | Green | 3 nos of each make and type. |  |
| (d) | White | 3 nos of each make and type. |  |
| (e) | Amber | 3 nos of each make and type. |  |
| (ii) | CT | 2 nos. for each make, type and Rating |  |
| (iii) | Transducer | 2 no for each make, type and Rating |  |
| (iv) | Trip / Neutral / close Control Switch | 2 nos. for each make, type and Rating |  |
| (v) | Switch gear or MCC / Trial / Normal selector switch | 2 nos. for each make, type and Rating |  |
| (vi) | Local/Remote selector switch | 2 nos. for each make, type and Rating |  |
| (vii) | AC Supply On / Off Switch | 1 no. for each make, type and Rating |  |
| (viii) | DC Supply On / Off Switch | 1 no. for each make, type and Rating |  |
| (ix) | Motor Heater On /Off Switch | 1 no. for each make, type and Rating |  |
| ( X ) | DC Supply Source Selector Switch (3-position) | 1 no. for each make, type and Rating |  |
| (xi) | Ammeter Selector Switch | 1 no. for each make, type and Rating |  |
| (xii) | Voltmeter Selector Switch | 1 no. for each make, type and Rating |  |
| (xiii) | Voltmeter | 2 no. for each make, type and Rating |  |
| (xiv) | Ammeter | 2 no. for each make, type and Rating |  |
| (xv) | Auxiliary Control Contactor |  |  |
| (a) | Auxiliary Control Contactor complete assembly | 10\% of total nos for each make, type and Rating. |  |
| (b) | Auxiliary Control Contactor spare kits | 10\% of total nos. for each make, type and Rating. |  |
| (c) | Auxiliary Control Contactor Coils | 10\% of total nos for each make, type and Rating. |  |
| (xvi) | Power Contactor |  |  |
| (a) | Power Contactor Complete Assembly | 10\% of total nos for each make, type and rating |  |
| (b) | Power Contactor spare kits | 10\% of total nos for each make, type and Rating. |  |
| (c) | Power Contactor Coils | 10\% of total nos for each make, type and Rating. |  |
| (xvii) | MCCB | 5\% of total nos. for each make, type and rating. |  |
| (xviii) | MCB | 5\% of total nos. for each make, type and rating. |  |
| (xix) | Switch Fuse Unit (DC) | 10\% of total nos. for each make, type and rating. |  |
| (xx) | Power Fuse | 5\% of total nos. for each make, type and rating. |  |
| (xxi) | Control Fuse | 5\% of total nos. for each make, type and rating. |  |
| (xxii) | Thermal Overload Relay | 5\% of total nos. for each make, type and rating. |  |
| (xxii) | Sliding contact (Fixed and moving) Complete assembly | 2 sets of each make, type and rating |  |


| (xxiii) | Busbar to module Lira Contact assembly | 2 sets of each make, type and rating ( 1 set means all $3 \mathrm{ph}+$ neutral) |  |  |
| :---: | :---: | :---: | :---: | :---: |
| (xxiv) | Control and Aux. Transformer | 1 no of each make, type and rating |  |  |
| (xxv) | Delay Timer | 2 no of each make, type and rating |  |  |
| (xxvi) | Power Terminal Block | 2 sets for each make, type and rating |  |  |
| (xxvii) | Control Terminal Block | 2 sets for each make, type and rating |  |  |
| (xxviii) | End plate for Power and Control terminal block | 2 sets for each make, type and rating |  |  |
| (xxix) | Energy meter | 1 no for each make, type and rating |  |  |
| (xxx) | Relays (Other than numerical relay): |  |  |  |
| (a) | Conventional (Electromagnetic/Static type) Relay | 2 no for each make, type and rating |  |  |
| (b) | Aux. relays \& Lock out relays \& TIMERS | 2 nos for each make, type and rating |  |  |
| (xxxi) | MCCB Status (On/off) Monitoring Switch/Contact | 2 nos for each make, type and rating |  |  |
| (xxxii) | Push Button (On/Off) Complete Assembly | 2 nos for each make, type and rating |  |  |
| (xxxiii) | Annunciation Facia with lamps complete | 1 set for each make, type and rating |  |  |
| 7.21 .00 | M otor |  |  |  |
| 7.21 .02 | 415 Volt M otor |  |  |  |
| (i) | End Shield Cover Driving \& Non-Driving End | 1 set for each type and rating of M otor |  |  |
| (ii) | Heaters | 2 sets for each type and rating of motor |  |  |
| (iii) | Bearings (DE and NDE) for each type and rating of motor | 2 sets |  |  |
| (iv) | Cooling Fan for all type and rating of LT motors | One (1) set |  |  |
| (v) | Dust seals and gaskets for each type of motors | 1 Set |  |  |
| (vi) | M otor Terminal Block | 1 no. for each type and rating of M otor |  |  |
| (vii) | Complete Set of Coupling | 1 set for each type and rating |  |  |
| Total |  |  | ₹ | - |
| NOTES: |  |  |  |  |
| 1 | Bidder to refer Notes in Annexure-II of Technical Specification. |  |  |  |
| 2 | *Refer Volume IIA, Reference clause of the "Customer Specification". |  |  |  |

