

SECTION 1

SCOPE, SPECIFIC TECHNICAL REQUIREMENTS AND QUANTITIES.

1.0 SCOPE

This technical specification covers the requirements of Erection Testing & commissioning of 765kV switchyard equipment as listed in clause 1.2 & 1.3 below.

1.1 The equipment is required for the following Project -

Name of customer : Power grid Corporation Of India Limited

Name of the Projects : 765kV Seoni Substations

1.2 Scope of Work

1.2.1 The Scope of Work under the Contract shall cover the erection , commissioning & testing at project site

| | | |
|----|---|-------|
| 1. | 765 KV / $\sqrt{3}$ /400KV/ $\sqrt{3}$, 500MVA, 1-phase, ICT | 1 no. |
| 2. | 765 KV / $\sqrt{3}$ / 80 MVAR, 1 - phase Shunt Reactor | 1 no. |
| 3. | 765 KV, 3-phase Circuit Breaker | 1 no. |
| 4. | 765 KV, 1-phase Current Transformer | 1 no. |
| 5. | 765 KV, 1-phase CVT | 1 no. |

1.2.2 The Scope of Work Contract includes unloading , receipt at site, erection, testing & commissioning of the above 765 kV equipment at SEONI 765/400/220kV substation of POWERGRID. Since separate bay for placement of above equipment into service is not envisaged, the scope shall also cover the dismantling of existing 1-phase ICT, 3-phase Circuit Breaker, 1-phase CT and 1-phase CVT, shifting into storage area, erection of BHEL's developed equipment & commissioning of the same.

The following works shall also be carried out under the Contract:

- 1.1 Not Used
- 1.2 Not Used
- 1.3 Un-loading the BHEL make Transformer & Shunt Reactor, oil and radiator banks in storage area.
- 1.4 Erection, system testing & commissioning of the BHEL make Transformer & Shunt Reactor Banks along with necessary marshalling boxes, cabling to integrate with the existing arrangement. For transformer dismantling of existing Fire Protection system and re erection of the same after locating new transformer is in scope.
- 1.5 Dismantling of the ABB make transformer & disconnection of ABB make reactor (already in service).
- 1.6 Transport and unloading of the ABB make transformer in designated place over foundation.
- 1.7 Loading, transport and unloading the BHEL make transformer & reactor in operating bay.
- 1.8 Dismantling of Siemens make Circuit Breaker, CT, CVT.
- ~~1.9~~ Not Used
- 1.10 Not Used
- 1.11 Erection of BHEL make Circuit Breaker, CT & CVT in the bay.

- 1.12 Subsystem /system commissioning of BHEL make Circuit Breaker, CT & CVT to integrate with existing arrangement.
- 1.13 Packing, transporting Siemens make Circuit Breaker CT, CVT to stores.
- ~~1.14~~ Not Used
- 1.15 Packing , transportation to storage site the existing piping work of cooler group including blanking of pipes wherever needed.
- 1.16 Not Used
- 1.17 Not Used
- 1.18** Not Used
- 1.19 One pipe structure to be erected and shield wire connection established with nearby tower for lighting protection of spare transformer.

Following equipment/tools tackles will be brought to the site as and when required for accomplishing the task and will be taken back.

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|----|---|-------|
| 1. | Oil filtration Plant | 1 No. |
| 2. | Gas filling & Evacuation Equipment | 1 No. |
| 3. | Breaker Operational Analyzer | 1 No. |
| 4. | SF6 Leak detector | 1 No. |
| 5. | General tools/tackles/test instrument/equipment | 1 Set |
| 6. | Construction equipment | 1 Set |

1.2.3 Not Used

1.3 Documents Enclosed :

765kV Substation Layout Plan & Sections Drg G71770-AB041-L168-001-A sht 1/3 Rev A