

eight (08) nos of 33KV bays including incomer bays. The auxiliary transformer shall be connected to the 33 kV bus by a disconnector switch with integrated dropout fuse.

132/33kV three phase 3 phase transformer

Two 132/33kV 50/75 MVA three phase transformers.

33/0.415kV auxiliary transformer

Two 33/0.415kV, 300kVA, outdoor type auxiliary transformers to supply the substation auxiliary loads. The auxiliary transformer shall be connected to the 33 kV bus by a disconnector switch with integrated dropout fuse.

Control, Protection, Substation Automation, Metering & DFDR

Associated local & Remote control panel, metering panel, protection equipment, synchronizing scheme and substation automation system (SAS) & DFDR for complete substation. Monitoring of status of Bus PT & Bus ES need to be included in the SAS. Necessary works to be performed so that Air temperature in the control building can be controlled and monitored through SAS. RTCC, LVAC, LVDC, Tariff metering panel & other panels shall be monitored by SAS.

Fibre Optic Multiplexer Equipment for Communication and Protection

Indoor type Fibre Optic Multiplexer Equipment for protection & communication.

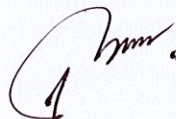
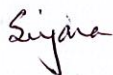
DC and LVAC System

Complete set of DC and LVAC system with all necessary materials required for the plant being installed with spares for future use of 110V DC battery & battery charger, 48 V DC battery & battery charger, DC distribution board and LVAC distribution board.

Civil Works, Building and Foundation

Land development of complete switchyard area by cutting, land filling, compacting up to a suitable level including slope protection.

Complete design, supply and construction of all civil items required for the outdoor works suitable for switchyard gantry & equipment foundations, transformer foundations, blast walls, oil pit; approach, entrance & internal roads; cable trenches, septic tank, surfacing, drainage, fences, guard house including earthing & lightning protection, switchyard lighting, etc.



side of two 132/33kV transformer; one 132kV bus-coupler bay; additional bus skeleton, gantry column and beam including earth mat shall be made for future extension of three overhead 132kV line/ transformer bays.

33kV Air Insulated Switches and Connection

New 33kV AIS switchyard and switches for 132/33kV LV side / incomer connection and station power service facilities;

Incomer side connection between 33kV terminal to 33kV Bus including switches, necessary fittings, structures, conductors for 132/33 transformers. 33KV Bus skeleton shall be built for eight (08) nos of 33KV bays including incomer bays. The auxiliary transformer shall be connected to the 33 kV bus by a disconnector switch with integrated dropout fuse.

132/33kV three phase 3 phase transformer

Two 132/33kV 50/75 MVA three phase transformers.

33/0.415kV auxiliary transformer

Two 33/0.415kV, 300kVA, outdoor type auxiliary transformers to supply the substation auxiliary loads. The auxiliary transformer shall be connected to the 33 kV bus by a disconnector switch with integrated dropout fuse.

Control, Protection, Substation Automation, Metering & DFDR

Associated local & Remote control panel, metering panel, protection equipment, synchronizing scheme and substation automation system (SAS) & DFDR for complete substation. Monitoring of status of Bus PT & Bus ES need to be included in the SAS. Necessary works to be performed so that Air temperature in the control room can be controlled and monitored through SAS. RTCC, LVAC, LVDC, Tariff metering panel & other panel shall be monitored by SAS.

Fibre Optic Multiplexer Equipment for Communication and Protection

Indoor type Fibre Optic Multiplexer Equipment for protection & communication.

DC and LVAC System

Complete set of DC and LVAC system with all necessary materials required for the plant being installed with spares for future use of 110V DC battery & battery charger, 48 V DC battery & battery charger, DC distribution board and LVAC distribution board.

Civil Works, Building and Foundation

Signature

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rev 1: SA-6

control IED and associated equipment, local control kiosks, 33kV tertiary equipment, cable trenches, water supply & sewerage, fences, access road & internal roads, security guard stations, and all other necessary substation facilities and supply of mandatory spare parts and maintenance & special tools.

132kV Air Insulated Switchgears (AIS)

New 132kV AIS switchyard for two 132kV line bays to connect Kachua 132/33kV AIS Substation (Kachua 1 & 2);Two 132kV transformer bays for HV side of two 132/33kV transformer; two 33kV transformer bays for LV side of two 132/33kV transformer; one 132kV bus-coupler bay; additional bus skeleton, gantry column and beam including earth mat shall be made for future extension of three overhead 132kV line/ transformer bays.

33kV Air Insulated Switches and Connection

New 33kV AIS switchyard and switches for 132/33kV LV side / incomer connection and station power service facilities;

Incomer side connection between 33kV terminal to 33kV Bus including switches, necessary fittings, structures, conductors for 132/33 transformers. 33KV Bus skeleton shall be built for eight (08) nos of 33KV bays including incomer bays. The auxiliary transformer shall be connected to the 33 kV bus by a disconnector switch with integrated dropout fuse.

132/33kV three phase 3 phase transformer

Two 132/33kV 50/75 MVA three phase transformers.

33/0.415kV auxiliary transformer

Two 33/0.415kV, 300kVA, outdoor type auxiliary transformers to supply the substation auxiliary loads. The auxiliary transformer shall be connected to the 33 kV bus by a disconnector switch with integrated dropout fuse.

Control, Protection, Substation Automation, Metering & DFDR

Associated local & Remote control panel, metering panel, protection equipment, synchronizing scheme and substation automation system (SAS) & DFDR for complete substation. Monitoring of status of Bus PT & Bus ES need to be included in the SAS. Necessary works to be performed so that Air temperature in the control room can be controlled and monitored through SAS. RTCC, LVAC, LVDC, Tariff metering panel & other panel shall be monitored by SAS.

Fibre Optic Multiplexer Equipment for Communication and Protection

Sijana

Mr.

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rev 1: SA-8

The scope of work under this turnkey Bid is design, supply, delivery, installation, testing & commissioning of a new Air Insulated Switchgear (AIS) substation. The configuration of the 132kV busbar shall be double Busbar scheme.

The scope of work also includes associated control, protection, fiber optic multiplexer equipment for communication & protection, substation automation, digital fault & disturbance recorder (DFDR), station power facilities, including towers and gantry structures, a new two storied Main Control Room Building in 132kV switchyard to accommodate protection and control IED and associated equipment, local control kiosks, 33kV tertiary equipment, cable trenches, water supply & sewerage, fences, access road & internal roads, security guard stations, and all other necessary substation facilities and supply of mandatory spare parts and maintenance & special tools.

132kV Air Insulated Switchgears (AIS)

New 132kV AIS switchyard for four 132kV line bays to connect Line in-out of existing 132kV Choumuhani-Ramganj double circuit overhead line (Choumuhani 1 & 2, Ramganj 1 & 2); Two 132kV transformer bays for HV side of two 132/33kV transformer; two 33kV transformer bays for LV side of two 132/33kV transformer; one 132kV bus-coupler bay; additional bus skeleton, gantry column and beam including earth mat shall be made for future extension of three overhead 132kV line/ transformer bays.

33kV Air Insulated Switches and Connection

New 33kV AIS switchyard and switches for 132/33kV LV side / incomer connection and station power service facilities;

Incomer side connection between 33kV terminal to 33kV Bus including switches, necessary fittings, structures, conductors for 132/33 transformers. 33KV Bus skeleton shall be built for eight (08) nos of 33KV bays including incomer bays. The auxiliary transformer shall be connected to the 33 kV bus by a disconnector switch with integrated dropout fuse.

132/33kV three phase 3 phase transformer

Two 132/33kV 80/120 MVA three phase transformers.

33/0.415kV auxiliary transformer

Two 33/0.415kV, 300kVA, outdoor type auxiliary transformers to supply the substation auxiliary loads. The auxiliary transformer shall be connected to the 33 kV bus by a disconnector switch with integrated dropout fuse.

Control, Protection, Substation Automation, Metering & DFDR

Sujana

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rev 1: SA-10