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18MVA SUBSTATION TRANSFORMER

DESCRIPTION

Item No. STT-06-0017

One (1) X Reconditioned Federal Pacific Three Phase 60Hz. Substation - 18000KVA Transformer
KVA: 18000/24000/30000
55 ° C Rise ONAN/ONAF/ONAF KVA: 20160/26880/33600
65 ° C Rise ONAN/ONAF/ONAF
Primary Voltage: 69000 Delta 350 KV BIL Secondary Voltage: 12470Y/7200 110 KV BIL
Primary Taps: 2-2.5% FCAN & BN
Secondary Taps 32 Position LTC on Secondary Side of Transformer With 16 - 5/8 % Positions Above & Below
Nominal
Impedance: 7.60%
Phase: 3
Frequency: 60 Harmonics Rating: K-1
Type Transformer: Substation

Accessories Included:

Primary Voltage Windings: Copper Continuous Disk
Secondary Voltage Windings: CTC Helical
Type of Cooling Medium: Mineral Oil
Primary Bushing Location: Cover Mounted ANSI Segment 3
Primary Bushing Type: Stud
Primary Bushing Connector Type: Spades
Secondary Bushing Location: Sidewall Mounted ANSI Segment 1
Secondary Bushing Enclosure Type: Full Length Air Terminal
Chamber: Secondary Bushing Type: Stud
Secondary Bushing Connector Type: Spades
LTC Mechanism: New Reinhausen RMV-II-2000 Amp - Yes
LTC Controller: New Beckwith M-2001 - Yes
Tap Changer: Yes
External Core Ground & Enclosure: Add
Main Tank Liquid Level Gauge W/ 2 Contacts: Yes
Main Tank Liquid Temperature Gauge W/3
Contacts: Yes Main Tank Pressure Gauge: Yes
Main Tank Bleeder Valve: Yes
Main Tank Winding Temperature Gauge W/4 Contacts: Yes
Main Tank Sub Class Pressure Relief W/Contacts: Yes

Main Tank Sudden Pressure Relay: Yes
LTC Liquid Level Gauge W/ 1 Contact: Yes
LTC Sub Class Pressure Relief W/Contacts: Yes
LTC Sudden Pressure Relay: None
Positive Nitrogen System: Yes Cooling Fans: Yes
Controls: Yes
HV Arrester Brackets: Yes

CT Terminal Block & Enclosure: Yes
 Radiators: Yes
 Impact Recorder: Yes
 Standard Aluminum Nameplate: Yes
 Drawings & Instruction Manuals: Yes

Notes:

Quoted with New Reinhausen RMV-II 2000 Amp LTC Mechanism. Will require a rewind of preventive auto from a 3 lead to a 4 lead. Also, includes an upgrade LTC control to a Beckwith M-2001D.

Due to the weight the unit will be best shipped less oil. That will require vacuum filling on site as part of the field dressing scope. Technical Field Services pricing is noted below. The cost of the oil and tanker freight is included in the pricing.

OPTIONAL: On Site Field Technical Advisory Services

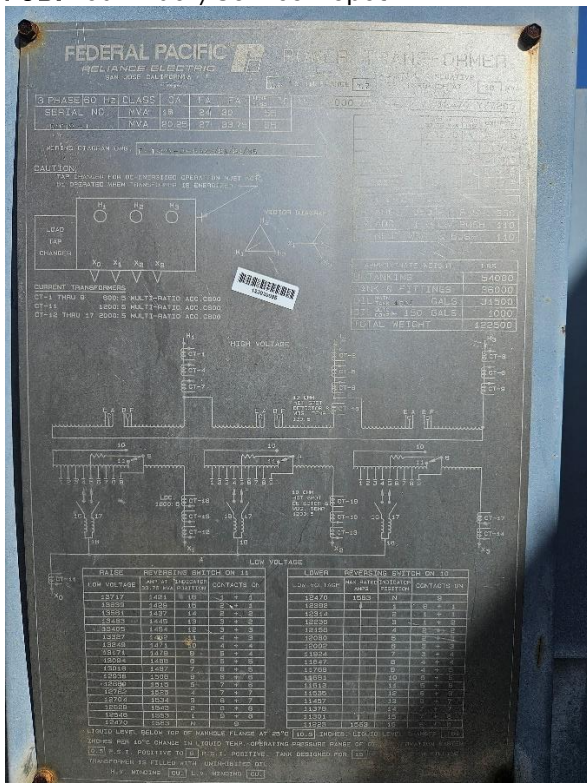
- Inspection
- Installation of HV Drawlead Bushings
- Installation of Cooling Radiators
- Vacuum fill 4,650 gallons of mineral oil
- Fuel Transportation
- Start Up & Acceptance Testing

Unit will be scheduled to be completely reconditioned to nameplate specifications w/shipment estimated: 25 - 27 Weeks - Subject to factory loading at time of order.

Add: Shipping, Handling and Insurance (to project site).

Price: Call For Pricing:

FOB: Your Truck/Service Depot



WARRANTY: One (1) Year (Ref. Addendum A)

1. WARRANTIES.

- (a) **Warranty Periods.** “Equipment Warranty Period” means: (i) for new Equipment, eighteen (18) months from the date of shipment of the Equipment to Customer or twelve (12) months from the date of energization of the Equipment, whichever occurs first; and (ii) for reconditioned Equipment, thirty-six (36) months from the date of shipment of the Equipment to Customer. If Customer is purchasing the Equipment to rent to or sell to its customers or to third-parties other than Customer, the warranty period shall be for twelve (12) months from the date of shipment of the Equipment by Company. “Services Warranty Period” means the period commencing the date Company completes such Services and ending twelve (12) months thereafter, whether or not such Services are performed by Company on Customer’s premises or Company’s premises. If the purpose of the Purchase Order is for Company to repair goods that are owned by Customer in Company’s shop (and is not warranty repair work), such Services will be guaranteed for a period of thirty-six (36) months from the date of the completion of such Services.
- (b) **Services Warranty.** Company warrants for the Services Warranty Period that: (i) Company will perform all Services in a good, safe and workmanlike manner in accordance with generally accepted industry practices applicable to the Services being performed, (ii) the Services are in accordance with the specifications set forth in the applicable Purchase Order, and (iii) the Services will be free from defects in materials and workmanship.
- (c) **Equipment Warranty.** For the Equipment Warranty Period, Company warrants the following regarding Sale Equipment manufactured by Company and Rental Equipment: (i) merchantable title to such Equipment; (ii) that they substantially comply with Customer’s specifications as set forth in the applicable Purchase Order; (iii) that they are guaranteed to operate in accordance with its nameplate when operated under normal load, usage, conditions and with proper care, installation and supervision; and (iv) that they will be free from defects in material and workmanship.
- (d) **Exclusions from Warranties.** Company does not warrant: (i) any Equipment, not manufactured by Company; (ii) that the specifications provided by the Customer are accurate, or fit for a particular use; (iii) damage caused by improper installation of the Equipment (unless performed by Company); (iv) damage caused by improper operations of the Equipment, voltage surges, negligence of others, accidents, natural forces (including fire, flood, wind and lightning), and operations beyond rated capacities, or misuse; (v) damage caused by use for purposes other than those for which it was designed; (vi) damage caused by unauthorized attachments or modification; (vii) damage caused by vandalism; or (viii) that the Equipment will meet or comply with the requirements of any safety code or regulation of any state, municipality, or other jurisdiction. If a warranty claim is made by Customer for a defect that occurs or manifests prior to the energization of the Equipment (unless Company performs the installation), Customer shall have the burden of proof that it is a legitimate warranty claim and that the Equipment was not damaged after delivery during the storing, moving or installation of such Equipment.
- (e) **Notice of Warranty Breach.** Customer shall provide timely, written notice to Company of warranty defects.
- (f) **Remedies.** Company shall promptly cure all valid Service Warranty defects described in such notices by reperforming the Services at Company’s cost. Any Sale Equipment or Rental Equipment provided by Company which breaches this warranty shall promptly and at Company’s sole option, be repaired or replaced by Company at Company’s cost, except as otherwise provided in this Section 9. Company shall repair at the Customer’s site all Equipment for which field repair is feasible. Should the Equipment require repair at Company’s plant, Company shall arrange and pay freight to and from Customer’s site anywhere in the continental U.S. Under no circumstances is Company responsible for any in/out charges associated with the connection reconnection, disassembly or rigging of the Equipment being serviced under this warranty. Company shall not be responsible for repairs or replacement made by third parties without the Company’s written consent. If Company fails to cure a defect within ten (10) days after receiving written notice of such defect, Customer may cure such defect directly or through a third party. In such case, Company shall reimburse Customer for the reasonable and documented costs incurred by Customer for

curing the defect within thirty (30) days after receipt of a written invoice from Customer. Any Services or Equipment cured shall have a Service Warranty Period or Equipment Warranty Period for the longer of the remainder of the original warranty period or six (6) months from the completion of the warranty cure.

- (g) **Warranty Limitation.** Company's obligation under these warranties shall not, in any event, exceed the line-item amount paid under the applicable Purchase Order for the defective Equipment or Services. If the costs of the reperformance, repair or replacement would exceed the original Purchase Order price for such item, Company's obligations under this warranty shall be satisfied by a return of the Purchase Order price for such item.
- (h) **Third-Party Warranties.** In the event that all or a portion of the Sale Equipment purchased are manufactured by others, the Customer's warranty is with the original manufacturer of those Equipment and subject to the warranty terms and conditions of that manufacturer. Company, as a seller of Equipment manufactured by others, will assist Customer in remediation of warranty claims, but in no circumstance is liable to fulfill the warranty obligation of those manufacturers or to cover expenses that are not covered by original manufacturers' warranty.
- (i) **Entire Warranties.** The foregoing provisions of this Section 9 are expressly in lieu of all other warranties whatsoever, express, implied and statutory. EXCEPT AS SET FORTH ABOVE, ALL WORK IS PROVIDED AS IS AND WITH ALL FAULTS. THE WARRANTIES MADE HEREIN SHALL BE IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SUCH IMPLIED WARRANTIES OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. FURTHER, THE WARRANTY REMEDIES SET FORTH HEREIN ARE THE SOLE WARRANTY REMEDIES AVAILABLE TO CUSTOMER FOR A BREACH OF WARRANTY CLAIM.