Santa Clara City - South Hills Substation

69kV SF6 Circuit Breaker 1200A (Qty: 1)

Bid Evaluation

Date: 10/26/2026

Design Specifications	Type: Dead-Tank Voltage: 69kV (Nominal), 72.5kV (Max) Insulation Level - Impulse Voltage, BIL: 350kV (@ 3,000' ASL) Insulation Level - Low Frequency, RMS: 160kV Nominal Frequency: 60Hz Rated Voltage Range Factor, K: 1.0 Rated Continuous Current, RMS: 1200A Rated Short Circuit Current, RMS: 40kA Rated Interrupting Time, Hz: 3 Cycles Max. Closing & Latching Capability, RMS: 108kA Short-Time Current Carrying Capability, RMS: 40kA Minimum Bushing Creep: 73" Minimum Phase Spacing: 37" Interrupting Medium: SF6 Control Voltage: 48VDC Auxiliary Power: 240/120VAC Spring Recharge Motor (if applicable): 48VDC 1200:5 MR C800 CTs (Qty: 12) -20°F to +125°F Ambient Temp. Range Wind Loaded for 100mph		
Vendor	Nexus Power	ElectroTech	EMA
Manufacturer	**ABB/Hitachi**	**Siemens**	**EMA**
Type	Dead Tank		Dead Tank
Quoted Specifications	Voltage: 72.5kV (Max) Insulation Level - Impulse Voltage, BIL: 350kV @ ≤ 3,000' Insulation Level - Low Frequency, RMS: 160kV (Dry) Nominal Frequency: 60Hz Rated Voltage Range Factor, K: Rated Continuous Current, RMS: 1200A Rated Short Circuit Current, RMS: 40kA Rated Interrupting Time, Hz: 3 Cycles Closing & Latching Capability, RMS: 104kA Short-Time Current Carrying Capability, RMS: 40kA Bushing Creep: 72" Phase Spacing: Interrupting Medium: SF6 Control Voltage: 48VDC Auxiliary Power: 120/240VAC Spring Recharge Motor (if applicable): 48VDC 1200:5 MR C800 CTs (Qty: 12) -40° C to +52° C w/out Tank Heaters	Voltage: 69kV (Nominal) Insulation Level - Impulse Voltage, BIL: 350kV @ ≤ 3,300' Insulation Level - Low Frequency, RMS: 160kV (Dry) Nominal Frequency: 60Hz Rated Voltage Range Factor, K: Rated Continuous Current, RMS: 1200A Rated Short Circuit Current, RMS: 40kA Rated Interrupting Time, Hz: 3 Cycles Closing & Latching Capability, RMS: Short-Time Current Carrying Capability, RMS: 40kA Bushing Creep: 114" Phase Spacing: Interrupting Medium: SF6 Control Voltage: 48VDC Auxiliary Power: 120VAC Spring Recharge Motor (if applicable): 120VAC/48VDC 1200:5 MR C800 CTs (Qty: 12) -40° C w/out Tank Heaters	Voltage: 69kV, 72.5kV (Max) Insulation Level - Impulse Voltage, BIL: 350kV @ 3,000' Insulation Level - Low Frequency, RMS: 160kV (Dry) Nominal Frequency: 50/60Hz Rated Voltage Range Factor, K: Rated Continuous Current, RMS: 1200A Rated Short Circuit Current, RMS: 40kA Rated Interrupting Time, Hz: 3 Cycles Closing & Latching Capability, RMS: 104kA Short-Time Current Carrying Capability, RMS: 40kA Bushing Creep: 53.7mm/kV* Phase Spacing: 45.1" Interrupting Medium: SF6 Control Voltage: 48VDC Auxiliary Power: 120/240VAC Spring Recharge Motor (if applicable): 48VDC 1200:5 MR C800 CTs (Qty: 12) -30° C to +50° C Rated for Wind Speed 93.2mph
Cost Each	$166,003.00	$124,298.00	$100,200.00
Cost (Qty: 1)	**$166,003.00**	**$124,298.00**	**$100,200.00**
Cost SF6 Gas	$1,000.00	Included	$1,800.00
Freight	Included*	Included	Included**
Tariff Costs (If Applicable)	$14,730.00	$1,996.00	
Total Cost Per Unit	$181,733.00	$126,294.00	$102,000.00
Overall Total Cost (Qty:1)	**$181,733.00**	**$126,294.00**	**$102,000.00**
Approval Drawings (weeks)	Provided w// Quote*	8 months prior to delivery	3-4
Delivery (weeks)	**110-114**	**85-95**	**48-50**
Field Engineering Service	Not Included	Not Included	Not Included
Warranty	(12) months after energization or (18) months after shipment	12 months after being placed in service or 18 months after shipment (whichever expires first)	5 yrs from delivery date
Notes:	**Manufactured in Pennsylvania** * CPT Destination (No offloading) ** Approvals drawings not submitted separately, included with proposal as final approval for proposed breaker. 1) Trip Coil Monitor Not Included 2) "The Tariff adder does not need to be ordered with the breakers. It is an anchor point calculated as per today's tariff situation." 3) "Tools & Accessories" adder cost for $4,500.	1) Tariffs will be assessed 3 months before delivery and adjusted if required. 2) Maximum operating temperature wasn't provided. 3) Field engineering costs are not included in this proposal. Field Service Contact Information is provided on page 5. 4) Auxiliary transformer for auxiliary power is not included. 5) No annunciators are included in this offer since no SEL device has been requested.	**Manufactured in Argentina** * 53.7mm/kV x 69kV = 3705.3mm = 145". Need to get clarification on bushing creep. ** No offloading. No additional transportation insurance after delivery.
Recommended Supplier:	**Siemens; based on consistency with existing units in system, price, and spec conformance** (*Assumes lead time is not problematic*)		