Santa Clara City - South Hills Substation

69kV Voltage Transformers (Qty: 3)
69kV Current Transformers (Qty: 3)
15kV Voltage Transformers (Qty: 3)

Bid Evaluation
Date: 10/7/2026

Design Specifications

69kV Voltage Transformer

Type: Single Bushing, Oil Filled
Voltage: 69kV (Nominal), 72.5kV (Max)
Insulation Level - Impulse Voltage, BIL: 350kV
Nominal Frequency: 60Hz
Rated Primary Voltage: 40.25kV
Winding Ratios: 350/600:1:1
Winding Accuracy: 0.3% at Burden WXYZ
Tapped Secondary: 115/69V

Ambient Temperature -40° C to +50° C
Wing Loadings through 100mph
Seismic Rating: High
Altitude: 3,300'

69kV Current Transformer
(Meter Class)

Type: Single Bushing, Oil Filled
Voltage: 69kV (Nominal), 72.5kV (Max)
Insulation Level - Impulse Voltage, BIL: 350kV
Nominal Frequency: 60Hz
Rated Primary Voltage: 69kV
Winding Ratios: 100/200:5 DR
Winding Accuracy: 0.3% at B0.1-1.8 Burden
Thermal Current: 63kA/1sec
Dynamic Current: 125kA
Minimum Continuous Overvoltage Factor: 1.1
Rating Factor: RF 2.0

Ambient Temperature -40° C to +50° C
Wind Loadings through 100mph
Seismic Rating: High
Altitude: 3,300'

15kV Voltage Transformer

Type: Single Bushing, Oil Filled (**or**) Dry Type
Voltage: 12.47kV (Nominal), 15.5kV (Max)
Insulation Level - Impulse Voltage, BIL: 110kV
Nominal Frequency: 60Hz
Rated Primary Voltage: 7.62kV
Winding Ratios: 60:1
Winding Accuracy: 0.3% at Burden WXYZ
Tapped Secondary: 115/69V

Ambient Temperature -40° C to +50° C
Wind Loadings through 100mph
Seismic Rating: High
Altitude: 3,300'

Vendor	Nexus Power	Carlson Sales	Peterson Co.	Ritz
Manufacturer	**ABB**	**GE**	**Trench**	**Ritz**
Quoted Specifications	Type: Not Included Voltage: Not Included Insulation Level - Impulse Voltage, BIL: Not Included Nominal Frequency: Not Included Rated Primary Voltage: Not Included Winding Ratios: Not Included Winding Accuracy: Not Included Tapped Secondary: Not Included Thermal Rating: Not Included Capacitance: Not Included Bushing Creep: Not Included Seismic Rating: Not Included	Type: Capacitive Voltage: 69kV, 72.5kV (Max) Insulation Level - Impulse Voltage, BIL: 350kV Nominal Frequency: 60Hz Rated Primary Voltage: 40.25kV Winding Ratios: 350/600 Winding Accuracy: 0.3WXYZ Tapped Secondary: Not Included Thermal Rating: 1500VA Capacitance: Not Included Bushing Creep: Not Included Ambient Temperature Not Included Altitude: Not Included Seismic Rating: High	Type: UT5-350-69 Voltage: 69kV, 72.5kV (Max) Insulation Level - Impulse Voltage, BIL: 350kV Nominal Frequency: 60Hz Rated Primary Voltage: 40.25kV (LG) Winding Ratios: 350/600:1 Winding Accuracy: 0.3WXYZ Tapped Secondary: 115/67.08V (two of these) Thermal Rating: 5000VA Capacitance: Not Included Bushing Creep: 51.87" Ambient Temperature -40° C to +50° C Altitude: 3,300' Seismic Rating: High	Type: Capacitive Voltage: 69kV (Nominal), 72.5kV (Max) Insulation Level - Impulse Voltage, BIL: 350kV Nominal Frequency: 60Hz Rated Primary Voltage: 40.25kV (LG) Winding Ratios: 350/600:1:1 Winding Accuracy: 0.3WXYZ Tapped Secondary: Not Included Thermal Rating: 1000VA Capacitance: 17000pF Bushing Creep: 71.6" Ambient Temperature -40° C to +50° C Altitude: Not Included Seismic Rating: High
	Type: Single Bushing Voltage: 15kV (Nominal) Insulation Level - Impulse Voltage, BIL: 110kV Nominal Frequency: 60Hz Rated Primary Voltage: 12.47kV (LL), 7.2kV (LG) Winding Ratios: 60:1 Winding Accuracy: 0.3Y and 0.3Y Tapped Secondary: 115/69V Thermal Rating: 1000VA Capacitance: Not Included Bushing Creep: 37" Seismic Rating: Not Included	Type: Single Bushing, Dry-Type Voltage: 15kV (Nominal) Insulation Level - Impulse Voltage, BIL: 110kV Nominal Frequency: 60Hz Rated Primary Voltage: 7.2kV Winding Ratios: 60:1 Winding Accuracy: 0.3Z Tapped Secondary: 115/69V Thermal Rating: 1500VA Capacitance: Not Included Bushing Creep: 20.38" Ambient Temperature -40° C to +50° C Altitude: 4,900' Max Seismic Rating: High	Type: Not Included Voltage: Not Included Insulation Level - Impulse Voltage, BIL: Not Included Nominal Frequency: Not Included Rated Primary Voltage: Not Included Winding Ratios: Not Included Winding Accuracy: Not Included Tapped Secondary: Not Included Thermal Rating: Not Included Capacitance: Not Included Bushing Creep: Not Included Ambient Temperature Not Included Altitude: Not Included Seismic Rating: Not Included	Type: VEF15-20, Single Bushing Dry-Type Voltage: 15.5kV Insulation Level - Impulse Voltage, BIL: 110kV Nominal Frequency: 60Hz Rated Primary Voltage: 7.2kV (LG) Winding Ratios: 60:1:1 Winding Accuracy: 0.3WXYZ Tapped Secondary: Not Included Thermal Rating: 2000VA Capacitance: Not Included Bushing Creep: 71.6" Ambient Temperature -40° C to +50° C Altitude: Not Included Seismic Rating: High
	Type: Not Included Voltage: Not Included Insulation Level - Impulse Voltage, BIL: Not Included Nominal Frequency: Not Included Rated Primary Voltage: Not Included Winding Ratios: Not Included Winding Accuracy: Not Included Thermal Current: Not Included Dynamic Current: Not Included Continuous Overvoltage Factor: Not Included Rating Factor: Not Included Bushing Creep: Not Included Seismic Rating: Not Included	Type: Inductive Voltage: 69kV, 72.5kV (Max) Insulation Level - Impulse Voltage, BIL: 350kV Nominal Frequency: 60Hz Rated Primary Voltage: 40.25kV Winding Ratios: 1000/2000:5 Winding Accuracy: 0.3B1.8 Thermal Current: Not Included Dynamic Current: Not Included Continuous Overvoltage Factor: Not Included Rating Factor: Not Included Bushing Creep: Not Included Ambient Temperature Not Included Altitude: Not Included Seismic Rating: High	Type: Inductive Current Transformer Voltage: 69kV, 72.5kV (Max) Insulation Level - Impulse Voltage, BIL: 350kV Nominal Frequency: 60Hz Rated Primary Voltage: Not Included Winding Ratios: 100/200:5 Winding Accuracy: 0.3B1.8 Thermal Current: 50kA/1sec Dynamic Current: Not Included Continuous Overvoltage Factor: Not Included Rating Factor: Not Included Bushing Creep: 71.65" Ambient Temperature -40° C to +50° C Altitude: 3,300' Seismic Rating: High	Type: Inductive Current Transformer Voltage: 69kV (Nominal), 72.5kV (Max) Insulation Level - Impulse Voltage, BIL: 350kV Nominal Frequency: 60Hz Rated Primary Voltage: Not Included Winding Ratios: 100/200:5 Winding Accuracy: 0.3B1.8 Thermal Current: 35kA/1sec Dynamic Current: 94.5kA Continuous Overvoltage Factor: Not Included Rating Factor: 2 Bushing Creep: 71.6" Ambient Temperature -40° C to +50° C Altitude: Not Included Seismic Rating: High
69kV VT Cost Per Unit	Not Included	$10,761.00	$13,700.00	$10,350.00
69kV VT Total Cost (Qty:3)	**Not Included**	**$32,283.00**	**$41,100.00**	**$31,050.00**
15kV VT Cost Per Unit	$2,143.62	$1,751.00	Not Included	$4,533.00
15kV VT Total Cost (Qty:3)	**$6,430.86**	**$5,253.00**		**$13,599.00**
69kV CT Cost Per Unit	Not Included	$12,895.00	$22,250.00	$14,250.00
69kV CT Total Cost (Qty:3)	**Not Included**	**$38,685.00**	**$66,750.00**	**$42,750.00**
Freight	Included	Included	Included	Included
Tariff Costs (If Applicable)		TBD	TBD	Not Included
Overall Total Cost	**$6,430.86**	**$76,221.00**	**$107,850.00**	**$87,399.00**
Approval Drawings (weeks)	Not Included	Not Included	Not Included	2 ARO
Delivery (weeks)	**32**	**43-45 / 24-26**	**46-48, 76-78**	**32-34, 25-27, 17-19 ARO**
Warranty	18 Months after delivery or 12 Months after installation	18 Months after delivery or 12 Months after installation	60 Months in Serice, Maximum 66 Months from Delivery	36 Months from date of delivery
Notes:	Made in USA 1) It's noted that proposed VT's do not fully comply with spec. CT's and 69kV VT's weren't included. 2) It's up to end user to ensure anchoring and hardware used is adequate for their seismic zone. 3) Cost of Freight needs clarification.	Made in Itajuba, Brazil (69kV) Made in Clearwater, FL (15kV) 1) Offer includes routine tests per the appropriate standard. 2) Need more clarification on some of the design specifications. 3) Need delivery times for approval drawings on all devices. 4) Did not include a tapped secondary winding for the 69kV VT. 5) 69kV CT winding ratio listed as 1000/2000:5; Doesn't match spec.	1) Bidder provided quote for alternative 69kV CVT ($11,500 ea / 60-62wk LT). No bid for the 15kV VT. 2) Proposal is valid until 9-27-2026 3) Taxes are not included with pricing.	1) Price doesn't include sales tax. 2) The 69kV VT has a lifetime accuracy warranty entails that at any time, during time in-service, that it is found to be non-compliant to the original accuracy performance standards, Ritz will, at it's sole discretion, readjust, repair or replace the unit in order that the original accuracy performance standards are met.
Recommended Supplier:	**Ritz; based on cost, lead time, and conformance to specs.**			