

**SIEMENS**

# Circuit Breaker

## Proposal 15301SU-M-1

October 29, 2015



LCRA 72kv, 145kv, 362kv  
Blanket

SF15953750

**Presented by:**  
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Application Engineer HVCB  
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Siemens Industry, Inc.  
444 Hwy 49 South  
Richland, MS 39128

Dear Customer:

Siemens Industry, Inc. would like to sincerely thank you for the opportunity to provide a proposal to you from our Jackson, MS, USA facility. The SPS2 Gas Circuit Breaker and CPV2 Circuit Switcher product lines have proven to be a successful global product offering. Since the introduction of the SPS2 family in 1997 we have shipped over 40,000 units in various ratings. Our portfolio of products produced in our facility includes:

SPS2 portfolio:

- 15.5 - 72.5 kV, 1200 - 3000 A, 40 kA
- 123 - 170 kV, 1200 - 3000 A, 40 kA
- 123 - 170 kV, 1200 - 4000 A, 50/63/80kA
- 245 kV, 1200 - 4000 A, 40/50/63/80 kA
- 362 kV, 1200 - 5000 A, 63 kA
- 550 kV, 2000 - 5000A, 63 kA

CPV2 portfolio:

- 15.5 - 72.5 kV, 1200 - 3000 A, 40 kA
- 123 - 170 kV, 1200 - 3000 A, 40 kA
- 245 kV, 1200 - 3000 A, 40 kA

The 362kV 63kA 4000A power circuit breaker offers the following advantages:

- ***Adheres to C37.06.1-2000***
- ***Interrupting capabilities at 63kA without line to ground capacitors***
- ***2 cycle interrupting spring-spring mechanism which ensures low ownership cost and fast interruption.***
- ***Standard 4000 Amp continuous current***
- ***Optional 5000 Amp continuous current***
- ***25-year maintenance cycle***
- ***Low installation cost***
- ***No required adjustments***
- ***Control schematics similar to current dead tank breakers where applicable***
- ***FA-5 model spring-spring mechanism***

No TRV capacitors are required to achieve full kA rating for typical applications!

The major components of these products are standardized across our complete product offering including: dead tank breakers, circuit switchers (Siemens switchers are live tank breakers) and GIS. The commonality of parts across all voltage ranges enables customers to reduce cost, minimize spare parts inventory and provides a common platform for product training. The SPS2 and CPV2 families use state of the art "self extinguishing principal" interrupters in all ratings. The FA-2 spring-spring mechanism is used for 15.5 kV to 170 kV, 40 kA units; the FA-4 spring-spring mechanism is used for 121kV to 245kV-3 cycle, 63kA units; and the FA-5 spring-spring mechanism is used for 245kV-2 cycle, 362KV, and 550kV. Siemens circuit breakers and circuit switchers fulfill the definite purpose high rate of rise for TRV circuit breaker requirements, the most demanding and robust conditions that exist.

Siemens prides itself in providing the highest quality breakers in the industry while maintaining flexibility to customize each unit to meet each customer's unique needs. Some examples of our premium design include: all roller or ball bearings, all sealed bearings, no lubrication needed in the field, no adjustments required in the field. Our breakers and circuit switchers have proven to be easier to put into service, require less maintenance and have a lower total ownership cost over their lifetime than our competition.

Again, we thank you for the opportunity to provide this proposal and look forward to any feedback or questions which you may have while reviewing our proposal.

Sincerely,

Whitney McMillan, PMP  
Application Engineer HVCB

# Proposal

Siemens Industry, Inc. (Siemens) agrees to sell to Purchaser and Purchaser agrees to purchase from Company the goods described below. All pricing is in USD.

Please note our recent name change! Any PO should be made out to Siemens Industry, Inc.

		Qty	Product	Price
Item 1	Gas Circuit Breaker (DT)	1	SPS2-72.5-40-1200-3PST	\$36,981.00

Description:

- 69kV nominal voltage
- 40kA maximum symmetrical interrupting capability
- 3000A maximum continuous current
- Capable of -40°C operation without tank heaters
- 73 inch creep porcelain bushings rated 350kV BIL @ 3300 feet ASL
- 3-cycle, 60Hz, spring-spring operated
- Gang Operation, Frame mounted outdoor Circuit Breaker
- Bushing Current Transformers (total 18 BCT's):
  - (15) 1200:5 MR C400 relay accuracy, RF 2.0
  - (3) 1000:5 MR 0.15B1.8 metering accuracy, RF 2.0

**Optional adder for SEL2505424XX device+provision & OM3 provisions \$1,364.00**

Item 1A	Gas Circuit Breaker (DT)	1	SPS2-72.5-40-1200-IPO	\$99,741.00
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Description:

Same as Item 1 except Independent Pole Operation with Zero Crossing Application (PSD).

		Qty	Product	Price
Item 2	Gas Circuit Breaker (DT)	1	SPS2-145-40-3000-3PST	\$49,498.00

Description:

- 138kV nominal voltage
- 40kA maximum symmetrical interrupting capability
- 3000A maximum continuous current
- Capable of -30°C operation without tank heaters
- 131 inch creep porcelain bushings rated 650kV BIL @ 3300 feet ASL
- 3-cycle, 60Hz, spring-spring operated
- Gang Operation, Frame mounted outdoor Circuit Breaker
- Bushing Current Transformers (total 18 BCT's):
  - (15) 1200:5 MR C400 relay accuracy, RF 2.0
  - (3) 1000:5 MR 0.15B1.8 metering accuracy, RF 2.0

**Optional adder for SEL2505424XX device+provision & OM3 provisions \$1,364.00**

Item 2A	Gas Circuit Breaker (DT)	1	SPS2-145-40-3000-IPO	\$110,831.00
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Description:

Same as Item 2 except Independent Pole Operation with Zero Crossing Application (PSD).

		Qty	Product	Price
<b>Item 3</b>	Gas Circuit Breaker (DT)	1	SPS2-145-63-3000-3PST	\$75,855.00

Description:

- 138kV nominal voltage
- 63kA maximum symmetrical interrupting capability
- 3000A maximum continuous current
- Capable of -30°C operation without tank heaters
- 131 inch creep porcelain bushings rated 650kV BIL @ 3300 feet ASL
- 3-cycle, 60Hz, spring-spring operated
- Gang Operation, Frame mounted outdoor Circuit Breaker
- Bushing Current Transformers (total 18 BCT's):
  - (15) 1200:5 MR C400 relay accuracy, RF 2.0
  - (3) 1000:5 MR 0.15B1.8 metering accuracy, RF 2.0

**Optional adder for SEL2505424XX device+provision & OM3 provisions \$1,364.00**

<b>Item 3A</b>	Gas Circuit Breaker (DT)	1	SPS2-145-63-3000-IPO	\$126,855.00
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Description:

Same as Item 3 except Independent Pole Operation with Zero Crossing Application (PSD).

		Qty	Product	Price
<b>Item 4</b>	Gas Circuit Breaker (DT)	1	SPS2-145-40-4000-3PST	\$90,310.00

Description:

- 138kV nominal voltage
- 63kA maximum symmetrical interrupting capability
- 4000A maximum continuous current
- Capable of -30°C operation without tank heaters
- 131 inch creep porcelain bushings rated 650kV BIL @ 3300 feet ASL
- 3-cycle, 60Hz, spring-spring operated
- Gang Operation, Frame mounted outdoor Circuit Breaker
- Bushing Current Transformers (total 18 BCT's):
  - (15) 1200:5 MR C400 relay accuracy, RF 2.0
  - (3) 1000:5 MR 0.15B1.8 metering accuracy, RF 2.0

**Optional adder for SEL2505424XX device+provision & OM3 provisions \$1,364.00**

<b>Item 4A</b>	Gas Circuit Breaker (DT)	1	SPS2-145-40-4000-IPO	\$146,973.00
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Description:

Same as Item 4 except Independent Pole Operation with Zero Crossing Application (PSD).

		Qty	Product	Price
<b>Item 5</b>	Gas Circuit Breaker (DT)	1	SPS2-145-63-4000-3PST	\$90,310.00

Description:

- 138kV nominal voltage
- 63kA maximum symmetrical interrupting capability
- 4000A maximum continuous current
- Capable of -30°C operation without tank heaters
- 131 inch creep porcelain bushings rated 650kV BIL @ 3300 feet ASL
- 3-cycle, 60Hz, spring-spring operated
- Gang Operation, Frame mounted outdoor Circuit Breaker
- Bushing Current Transformers (total 18 BCT's):
  - (15) 1200:5 MR C400 relay accuracy, RF 2.0
  - (3) 1000:5 MR 0.15B1.8 metering accuracy, RF 2.0

**Optional adder for SEL2505424XX device+provision & OM3 provisions \$1,364.00**

<b>Item 5A</b>	Gas Circuit Breaker (DT)	1	SPS2-145-63-4000-IPO	\$146,973.00
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Description:

Same as Item 5 except Independent Pole Operation with Zero Crossing Application (PSD).

		Qty	Product	Price
<b>Item 6-9</b>	Gas Circuit Breaker (DT)	1	SPS2-362-63-4000-IPO	\$201,958.00

Description:

- 345 kV nominal voltage
- 63kA maximum symmetrical interrupting capability
- 4000A maximum continuous current
- Capable of -30°C operation without tank heaters
- 356 inch creep composite bushings rated 1300kV BIL @ 3300 feet ASL
- 2 cycle, 60Hz, spring-spring operated
- Independent Pole Operation, Frame mounted outdoor Circuit Breaker
- Phase Synchronizing Device control not included\*\*
- Bushing Current Transformers (total 18 BCT's):
  - (15) 1200:5 MR C400 relay accuracy, RF 2.0
  - (3) 1000:5 MR 0.15B1.8 metering accuracy, RF 2.0

**Optional adder for SEL2505424XX device+provision & OM3 provisions \$1,364.00**

**\*\* With Zero Crossing Application (PSD) price adder**

**\$214,715 net CB price**

Item	Qty	Product	Price
10-11 Gas Circuit Breaker (DT)	1	SPS2-362-63-5000-IPO	\$208,958.00

Description:

- 345 kV nominal voltage
- 63kA maximum symmetrical interrupting capability
- 5000A maximum continuous current
- Capable of -30°C operation without tank heaters
- 356 inch creep composite bushings rated 1300kV BIL @ 3300 feet ASL
- 2 cycle, 60Hz, spring-spring operated
- Independent Pole Operation, Frame mounted outdoor Circuit Breaker
- Phase Synchronizing Device control not included\*\*
- Bushing Current Transformers (total 18 BCT's):
  - (15) 1200:5 MR C400 relay accuracy, RF 2.0
  - (3) 1000:5 MR 0.15B1.8 metering accuracy, RF 2.0

Optional adder for SEL2505424XX device+provision & OM3 provisions \$1,364.00

\*\* With Zero Crossing Application (PSD) price adder \$221,715 net CB price

Optional Equipment for Circuit Breakers

Item A:

Qty.	DESCRIPTION	NET UNIT PRICE
1	Y-Relay	\$250.00
1	Close Coil	\$250.00
1	Trip Coil	\$250.00
1	Charging Motor	\$800.00

NOTE: Above spare parts prices are only valid with the purchase of the Circuit Breaker requested.

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No sales or users tax is included in our prices.

## **Siemens Industry Inc Additional Offers**

**Item 1: Seekirk Annunciator Model B-1002A \$1,479.00**

**Item 2: Siemens will provide two (2) days of on-site power circuit breaker training at no charge to LCRA. Training is a \$9500.00 value. Must be scheduled by December 31, 2017.**

**Item 3: Service for Synchronous Control Device (PSD)**

PSD is for applications requiring synchronous opening/closing at current zero.

PSD is an alternate solution to pre-insertion resistors.

Siemens will provide on-site training with the installation for **free** to the customer. Also, Siemens personnel will provide the commissioning for the PSD device for **free** if the option is purchased.

**Item 4: Technical Field Assistance**

This service will include technical oversight/supervision for the following:

Securing of the unit to the foundation

Bushing installation (if required)

Pole unit evacuation and gas filling (if required)

Connecting inter-phase control circuit wiring (if required)

Connecting current transformer secondary wiring from pole units to the control cabinet (if required)

Completing electrical tests (including contact resistance and timing)

Completing operational and functional checkout of equipment

Purchaser will make all HV lead connections and all terminations for external sources to breaker control cabinets. Siemens will provide a Technical Field Representative only. Additional labor, equipment, and material requirements are the purchaser's responsibility. Normal fee is **\$2500** per day plus **\$2000** per round trip. Siemens estimates installation and commissioning to require no more than 3 days.

**Factory supervision and training will be provided at no charge for three (3) circuit breakers. Must be scheduled by December 31, 2017.**

# Clarifications

Siemens circuit breakers are designed and tested according to ANSI/IEEE C37.06, and are not guaranteed to conform to other standards included by reference only.

Below are Siemens Energy, Inc. comments and clarifications of the Technical Specification for 72.5kV / 145kV / 345kV Power Circuit Breakers.

## **SF6 Gas:**

**Does not include SF6 fill gas required for operation.**

## **General:**

Siemens circuit breakers will be shipped fully assembled with the exception of extension legs. The extension legs will be installed before placing the unit on the foundation on ratings below 345kV.

## **Construction:**

All Siemens SF6 circuit breakers conform to the ASME inspection code. Any vessels with greater than 5 cubic feet of gas volume are stamped with the ASME Certified U-Stamp as a standard.

## **Operating Mechanism:**

Siemens circuit breakers utilize a spring spring mechanism from SPS2-72.5kV – 550kV Power Circuit breakers.

## **Control Cabinet:**

Wiring inside control cabinet will be consistent with units currently supplied to LCRA.

Slow operation of the contacts will not be possible. Provisions to manually charge the spring operating mechanism will be provided for maintenance purposes.

## **SEL2505 & OPTIMIZER 3 (OM3) Provisions:**

SEL2505 device + provisions for mounting as well as OM3 provisions are not included in base prices. If optional adder is selected, SEL2505 device/provisions and provisions to mount the OM3 device and accessories will be provided in each breaker which include manifold block adapter for inside density switch application, mounting provision on a swing panel, and terminal blocks for additional wiring.

## **Current Transformers:**

Bushing type current transformers will be provided; however, removal of the bushings will be required to replace or exchange current transformers in the field for breakers at the 145kV voltage level. Current transformers which are field removable are available with the addition of a special application. Details and costs can be provided if this is a requirement.

## **TRV Capacitors (Optional):**

Siemens has designed a power circuit breaker which does not require TRV capacitors to achieve the interrupting capability of 63kA for voltage levels of 145kV, 245kV, and 345kV.

## **Ground Pads:**

Stainless steel ground pads will be provided on the base of the circuit breaker legs on diagonally opposite sides of the breaker, the circuit breaker frame, and the circuit breaker control cabinet.

## **Accessories:**

Doble test terminals will not be provided with circuit breakers. If LCRA requires Siemens to provide these terminals, a quotation will be provided.



**Bushings and Insulators:**

A condenser type bushing is not applicable to Siemens SF6 type circuit breakers and will not be provided.

**Sulfur-Hexafluoride Gas:**

Gas system will be identical to currently supplied Siemens circuit breakers.

SF6 gas piping will be copper identical to currently supplied units from Siemens.

**10.1.3 Manufacturer Tests:**

Power factor testing is not applicable to Siemens SF6 Power Circuit breakers and will not be performed as routine manufacturer testing.

# Commercial Terms

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Approval drawings (if req'd) will be transmitted 8-10 weeks after receipt of purchase order at factory with all necessary technical information or 12 weeks prior to shipment whichever expires later. Failure to return approval drawings within (1) week after submittal may delay shipment; approval drawings must be finalized a minimum of 6 weeks prior to the shipment date. Expedited approval drawings can be provided with all necessary technical information for a fee.

**PRICE POLICY:** Prices are firm for orders place through Dec 31, 2017. For additional years prices will remain firm provided that material cost do not vary by more than 5%.

**TERMS OF PAYMENT:** Net 30 days after shipment (subject to credit approval)

**SHIPPING DATE:** 72kV-145kV: 18-20 weeks ARO (to be confirmed at time of order)  
362kV: 24-28 weeks ARO (to be confirmed at time of order)

**DELIVERY TERMS:** Freight is included in the quoted price for shipments within the contiguous 48 United States. Additional shipping charges may apply if conditions do not permit Seller to utilize its standard delivery methods to the requested delivery destination.

**WARRANTY:** The warranty period covers the equipment for 60 months after shipment.

**CONDITIONS:** Terms and conditions from LCRA/Siemens Contract #3608 (agreed Dec 2012)

## CANCELLATION POLICY:

Cancellation of equipment for High Voltage circuit breakers will be subject to cancellation charges based on the following policies: (all percentages refer to contract price)

- 1.) Cancellation will automatically result in:
  - 10% charge for the engineering work on the breaker (Provided that work was accomplished).
  - The customer will also be responsible for the cost of any non standard items that Siemens purchased in advance to outfit the breaker per specifications.
- 2.) Further charges depend on:
  - Cancellation of items made to customer order that is scheduled for shipment in twelve (12) months or less - A charge of five percent (5%) of the contract price will be made for each month that the contract was held (from P.O. date until cancellation date).
  - Orders that are scheduled to ship in less than thirty (30) days are non-cancellable.

**OTHER TERMS:**

This proposal will remain in effect for 120 days, unless changed in the interim upon written notice from Company. Documents and related correspondence shall be sent to the Company's office.

This proposal is based upon the Company's interpretation of the plans and specification and is subject to correction for errors. This document and any other documents specifically referred to as being a party hereof constitutes the entire agreement on the subject matter, and it shall not be modified except in writing signed by both parties.

This proposal is based upon the standard terms and conditions of sale attached. Company hereby objects to any additional or different terms set forth in Purchaser's request for proposal, specification, purchase order or any other document of Purchaser. Acceptance of additional or different terms must be specifically assented to in writing by Company.

**Export Compliance**

Offer validity is subject to compliance with applicable export laws and regulations relating to the sale, exportation, transfer, assignment, disposal and usage of the goods provided under this agreement, including any export license requirements and a successful screening within DAMEX-E system.

# Surge Arresters

You can order surge arresters when you place your order as an additional line item on the same PO!



**Arresters.** The Siemens 3EL2 family of polymer-housed surge arresters features a cage design with high temperature vulcanized silicone rubber molded directly onto the MOV stack. Each arrester unit is of one-piece construction with no joints or seams in the rubber, and they come with high creepage distance and high mechanical strength. Units ship complete with a NEMA 4-hole pad at the line end and an 8-10 inch bolt circle base. Type 3EL2 surge arresters are available in ratings from 3 to 294kV, have a thermal energy absorption capability of 10kJ/kV MCOV, and meet IEEE C62.11 and ANSI 693-2005 requirements.

Circuit Breaker Nominal voltage	Arrester Ratings (line-ground KV)		Type 3EL2	Unit Pricing
	Duty cycle	MCOV	Part Number	
69kV	<b>54</b>	<b>42</b>	<b>3EL2 054-2PF31-4XH5</b>	\$ 526
	60	48	3EL2 060-2PF31-4XH5	\$ 540
115kV	<b>90</b>	<b>70</b>	<b>3EL2 090-2PJ31-4XH5</b>	\$ 837
	96	76	3EL2 096-2PJ31-4XH5	\$ 904
138kV	<b>108</b>	<b>84</b>	<b>3EL2 108-2PM31-4XH5</b>	\$ 999
	111	88	3EL2 111-2PM31-4XH5	\$ 1,039
161kV	<b>120</b>	<b>98</b>	<b>3EL2 120-2PM31-4XH5</b>	\$ 1,120
	132	106	3EL2 132-2PQ32-4XH5	\$ 1,417
230kV	<b>172</b>	<b>140</b>	<b>3EL2 172-2PJ32-4XH5</b>	\$ 1,795
	180	144	3EL2 180-2PJ32-4XH5	\$ 1,863
345kV	<b>258</b>	<b>209</b>	<b>3EL2 258-2PM32-4XH5</b>	\$ 2,565
	264	212	3EL2 264-6PW42-4XH5	\$ 2,889
	276	220	3EL2 276-6PW42-4XH5	\$ 3,024

\* **bold** indicates most recommended for that rating

All Siemens Product lines in our Jackson, MS based facility adhere to the high quality standards you have come to expect from a Siemens product and are supported by our 24 hour emergency customer service. So if you need a voltage regulator, transformer, line insulator or surge arrester look to Siemens and let us have the opportunity to share with you our other high performance, proven product lines.

**Siemens Industry, Inc.**  
**High Voltage Products Division**  
**Standard Terms and Conditions of Product Sales and Services (3/31/2010)**

**1. Applicable Terms.** These terms govern the sale of goods and services (collectively, "Products") by Siemens. Whether these terms are included in a proposal, offer or an acceptance by Siemens, such proposal, offer or acceptance is conditioned on Buyer's assent to these terms. Any additional, different or conflicting terms contained in Buyer's request for proposal, specifications, purchase order or any other written or oral communication from Buyer shall not be binding in any way on Siemens. Siemens' failure to object to any such additional, different or conflicting terms shall not operate as a waiver of these terms.

**2. Pricing & Payment.** The prices for the Products shall be: (a) as stated in Siemens' proposal; or, if none are stated (b) Siemens' standard prices in effect at the time of release for shipment or performance of services. In the event of a price increase or decrease, the price of Products on order shall be adjusted to reflect such increase or decrease. This does not apply to a shipment held by request of Buyer. Products already shipped are not subject to price increase or decrease. Siemens may require, at its discretion, a reasonable and appropriate down payment prior to commencing work. Discounts, if any, are as specified on the latest discount sheets issued from time to time. Cash discounts are not applicable to notes or trade acceptances, to prepaid transportation charges when added to Siemens' invoices or to discountable items if there are undisputed past due items on the account. Cash discounts shall only be allowed on that portion of the invoice paid within the normal discount period.

(a) *Payment* - Unless otherwise stated, all payments shall be net thirty (30) days from the date of invoice payable in United States Dollars.

(b) *Credit Approval* - All orders are subject to credit approval by Siemens. The amount of credit or terms of payment may be changed or credit withdrawn by Siemens at any time for any reason without advance notice. Siemens may, in its discretion, withhold further manufacture, performance or shipment; require immediate cash payments for past and future shipments or performance; or require other security satisfactory to Siemens before further manufacture, performance or shipment is made; and may, if shipment has been made, recover the Products from the carrier, pending receipt of such assurances.

(c) *Installment Shipment* - If these terms require or authorize delivery of Products in separate lots, shipments or milestones to be separately accepted by Buyer, Buyer may only refuse such portion of a lot, shipment or milestone that fails to comply with the requirements of these terms. Buyer may not refuse to receive any lot or portion of hereunder for failure of any other lot or portion of a lot to be delivered or to comply with these terms, unless such right of refusal is expressly provided for on the face hereof. Buyer shall pay for each lot in accordance with the terms hereof. Payment shall be made for the Products without regard to whether Buyer has made or may make any inspection of the Products. Products held for Buyer are at Buyer's sole risk and expense.

(d) *Taxes, Shipping, Packing, Handling* - Except to the extent expressly stated in these terms, Siemens' prices do not include any freight, storage, insurance, taxes, excises, fees, duties or other government charges related to the Product, and Buyer shall pay such amounts or reimburse Siemens for any amounts Siemens pays. If Buyer claims a tax or other exemption or direct payment permit, it shall provide Siemens with a valid exemption certificate or permit and indemnify, defend and hold Siemens harmless from any taxes, costs and penalties arising out of same. Siemens' prices include the costs of its standard domestic packing only. Any deviation from this standard packing (domestic or export), including U.S. Government sealed packing, shall result in extra charges. To determine such extra charges, consult Siemens' sales offices. Any and all increases, changes, adjustments or surcharges (including, without limitation, fuel surcharges) which may be in connection with the freight charges, rates or classification included as part of these terms, shall be for the Buyer's account.

(e) *Finance Charge* - Buyer agrees to pay FINANCE CHARGES on the unpaid balance of all overdue invoices, less any applicable payments and credits, from the date each invoice is due and payable at an ANNUAL PERCENTAGE RATE of EIGHTEEN PERCENT (18%), or the highest applicable and lawful rate on such unpaid balance, whichever is lower.

(f) *Disputed Invoice* - In the event Buyer disputes any portion or all of an invoice, it shall notify Siemens in writing of the amount in dispute and the reason for its disagreement within twenty-one (21) days of receipt of the invoice. The undisputed portion shall be paid when due, and FINANCE CHARGE on any unpaid portion shall accrue, from the date due until the date of payment, to the extent that such amounts are finally determined to be payable to Siemens.

(g) *Collection* - Upon Buyer's default of these terms, Siemens may, in addition to any other rights or remedies at contract or law, subject to any cure right of Buyer, declare the entire balance of Buyer's account immediately due and payable or foreclose any security interest in Products delivered. If any unpaid balance is referred for collection, Buyer agrees to pay Siemens, to the extent permitted by law, reasonable attorney fees in addition to all damages otherwise available, whether or not litigation is commenced or prosecuted to final judgment, plus any court costs or expenses incurred by Siemens, and any FINANCE CHARGES accrued on any unpaid balance owed by Buyer.

(h) *Suspension/Termination Right* - Siemens reserves the right to suspend work if Buyer is over thirty (30) days late in payment of an undisputed invoice. Siemens reserves the right to terminate the order if Buyer is over sixty (60) days late in payment of an undisputed invoice.

**3. Delivery; Title; Risk of Loss.** Product shall be delivered F.O.B. Siemens point of shipment with title to the Product and risk of loss or damage for the Product passing to Buyer at that point. Buyer shall be responsible for all transportation, insurance and related expenses including any associated taxes, duties or documentation. Siemens may make partial shipments. Shipping dates are approximate only and Siemens shall not be liable for any loss or expense (consequential or otherwise) incurred by Buyer or Buyer's customers if Siemens fails to meet the specified delivery schedule.

**4. Deferral and Cancellation.** Buyer shall have no deferral rights and Buyer shall be liable for cancellation charges, which shall include without limitation: (a) payment of the full product price for any finished Product or works in progress; (b) payment for raw materials ordered pursuant to a firm purchase order; and (c) such other direct costs incurred by Siemens as a result of such cancellation.

**5. Force Majeure / Delays.** If Siemens suffers delay in performance due to any cause beyond its reasonable control, including without limitation acts of God, strikes, labor shortage or disturbance, fire, accident, war or civil disturbance, delays of carriers, failure of normal sources of supply, or acts of government, the time of performance shall be extended a period of time equal to the period of the delay and its consequences. Siemens will give to Buyer notice within a reasonable time after Siemens becomes aware of any such delay. Siemens shall be entitled to reimbursement of actual costs directly attributable to the force majeure event. A force majeure event lasting greater than six (6) months shall entitle either party to terminate the agreement.

**6. Buyer's Requirements.** Timely performance by Siemens is contingent upon Buyer's supplying to Siemens all required technical information and data, including drawing approvals, and all required commercial documentation. Siemens shall be entitled to a change order under [Section 11](#) of these terms for any delay caused by the Buyer, its contractors, successors or assigns.

**7. Limited Warranty.** (a) *Limited Product Warranty Statements* - For each Product purchased from Siemens or an authorized reseller, Siemens makes the following limited warranties: (i) the Product is free from defects in material and workmanship, (ii) the Product materially conforms to Siemens' specifications that are attached to, or expressly incorporated by reference into, these terms; (iii) at the time of delivery, Siemens has title to the Product free and clear of liens and encumbrances; and (iv) for professional services performed by Siemens

hereunder, Siemens warrants the services will be performed in accordance with generally accepted professional standards (collectively, the "Limited Warranties"). The Limited Warranties set forth herein does not apply to any software furnished by Siemens. If software is furnished by Siemens, then the attached Software License Addendum shall apply.

(b) *Conditions to the Limited Warranties* - The Limited Warranties are conditioned on (i) Buyer storing, installing, operating and maintaining the Product in accordance with Siemens' instructions; (ii) no repairs, modifications or alterations being made to the Product other than by Siemens or its authorized representatives; (iii) using the Product within any conditions or in compliance with any parameters set forth in specifications that are attached to, or expressly incorporated by reference into, these terms; (iv) Buyer discontinuing use of the Product after it has, or should have had, knowledge of any defect in the Product; (v) Buyer providing prompt written notice of any warranty claims within the warranty period described below; (vi) at Siemens' discretion, Buyer either removing and shipping the Product or non-conforming part thereof to Siemens, at Buyer's expense, or Buyer granting Siemens access to the Products at all reasonable times and locations to assess the warranty claims; and (vii) Buyer not being in default of any payment obligation to Siemens under these terms.

(c) *Exclusions from Limited Warranty Coverage* - The Limited Warranties specifically exclude any equipment comprising part of the Product that is not manufactured by Siemens or not bearing its nameplate. To the extent permitted, Siemens hereby assigns any warranties made to Siemens for such equipment. Siemens shall have no liability to Buyer under any legal theory for such equipment or any related assignment of warranties. Additionally, any Product that is described as being experimental, developmental, prototype, or pilot is specifically excluded from the Limited Warranties and provided to Buyer "as is" with no warranties of any kind. Also excluded from the Limited Warranties are normal wear and tear items including any expendable items that comprise part of the Product, such as fuses, light bulbs and lamps.

(d) *Limited Warranty Period* - Buyer shall have twelve (12) months from initial operation of the Product or eighteen (18) months from shipment, whichever occurs first (or in the case of services, twelve (12) months from the completion of services), to provide Siemens with prompt, written notice of any claims of breach of the Limited Warranties. Continued use or possession of the Product after expiration of the warranty period shall be conclusive evidence that the Limited Warranties have been fulfilled to the full satisfaction of Buyer, unless Buyer has previously provided Siemens with notice of a breach of the Limited Warranties.

(e) *Remedies for Breach of Limited Warranty* - Buyer's sole and exclusive remedies for any breach of the Limited Warranties are limited to Siemens' choice of repair or replacement of the Product, or non-conforming parts thereof, re-performance of the services, or refund of all or part of the purchase price. The warranty on repaired or replaced parts of the Product or re-performed services shall be limited to the remainder of the original warranty period. Unless otherwise agreed to in writing by Siemens, (i) Buyer shall be responsible for any labor required to gain access to the Product so that Siemens can assess the available remedies and (ii) Buyer will be responsible for providing Siemens with working access to the Products, including the removal, disassembly, replacement or reinstallation of any equipment, materials or structures to the extent necessary to permit Siemens to perform its warranty obligations, or transportation costs to and from the Siemens factory or repair facility, or for damage to equipment components or parts resulting in whole or in part from improper maintenance or operation or from their deteriorated condition. All exchanged Products replaced under this Limited Warranty will become the property of Siemens.

(f) *Transferability* - The Limited Warranties shall be transferable during the warranty period to the initial end-user of the Product.

THE LIMITED WARRANTIES SET FORTH IN THIS [SECTION 7](#) ARE SIEMENS' SOLE AND EXCLUSIVE WARRANTIES AND ARE SUBJECT TO THE LIMITS OF LIABILITY SET FORTH IN [SECTION 8](#) BELOW. SIEMENS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, COURSE OF DEALING AND USAGE OF TRADE.

**8. LIMITATION OF LIABILITY.** NEITHER SIEMENS, NOR ITS SUPPLIERS, SHALL BE LIABLE, WHETHER IN CONTRACT, WARRANTY, FAILURE OF A REMEDY TO ACHIEVE ITS INTENDED OR ESSENTIAL PURPOSES, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, INDEMNITY OR ANY OTHER LEGAL THEORY, FOR LOSS OF USE, REVENUE, SAVINGS OR PROFIT, OR FOR COSTS OF CAPITAL OR OF SUBSTITUTE USE OR PERFORMANCE, OR FOR INDIRECT, SPECIAL, LIQUIDATED, PUNITIVE, EXEMPLARY, COLLATERAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR FOR ANY OTHER LOSS OR COST OF A SIMILAR TYPE, OR FOR CLAIMS BY BUYER ITS SUCCESSORS OR ASSIGNS FOR DAMAGES OF BUYER'S CUSTOMERS.

SIEMENS' MAXIMUM LIABILITY UNDER THIS CONTRACT SHALL BE THE ACTUAL PURCHASE PRICE RECEIVED BY SIEMENS FOR THE PRODUCT AT ISSUE OR ONE MILLION DOLLARS, WHICHEVER IS LESS. BUYER AGREES THAT THE EXCLUSIONS AND LIMITATIONS SET FORTH IN THIS [SECTION 8](#) ARE SEPARATE AND INDEPENDENT FROM ANY REMEDIES WHICH BUYER MAY HAVE HEREUNDER AND SHALL BE GIVEN FULL FORCE AND EFFECT WHETHER OR NOT ANY OR ALL SUCH REMEDIES SHALL BE DEEMED TO HAVE FAILED OF THEIR ESSENTIAL PURPOSE. THESE LIMITATIONS OF LIABILITY ARE EFFECTIVE EVEN IF SIEMENS HAS BEEN ADVISED BY BUYER OF THE POSSIBILITY OF SUCH DAMAGES. SIEMENS LIABILITY WITH REGARD TO THIS AGREEMENT SHALL CEASE UPON THE EXPIRATION OF THE LIMITED WARRANTY PERIOD.

**9. PATENT AND COPYRIGHT INFRINGEMENT.** Siemens will, at its own expense, defend or at its option settle any suit or proceeding brought against Buyer in so far as it is based on an allegation that any Product (including parts thereof), or use thereof for its intended purpose, constitutes an infringement of any United States patent or copyright, if Siemens is promptly provided notice and given authority, information, and assistance in a timely manner for the defense of said suit or proceeding. Siemens will pay the damages and costs awarded in any suit or proceeding so defended. Siemens will not be responsible for any settlement of such suit or proceeding made without its prior written consent. In case the Product, or any part thereof, as a result of any suit or proceeding so defended is held to constitute infringement or its use by Buyer is enjoined, Siemens will, at its option and its own expense, either: (a) procure for Buyer the right to continue using said Product; (b) replace it with substantially equivalent non-infringing Product; or (c) modify the Product so it becomes non-infringing.

Siemens will have no duty or obligation to Buyer under this [Section 9](#) to the extent that the Product is (a) supplied according to Buyer's design or instructions wherein compliance therewith has caused Siemens to deviate from its normal course of performance; (b) modified by Buyer or its contractors after delivery; or (c) combined by Buyer or its contractors with devices, methods, systems or processes not furnished hereunder and by reason of said design, instruction, modification, or combination a suit is brought against Buyer. In addition, if by reason of such design, instruction, modification or combination, a suit or proceeding is brought against Siemens, Buyer shall protect Siemens in the same manner and to the same extent that Siemens has agreed to protect Buyer under the provisions of this [Section 9](#).

THIS [SECTION 9](#) IS AN EXCLUSIVE STATEMENT OF ALL THE DUTIES OF THE PARTIES RELATING TO PATENTS AND COPYRIGHTS, AND DIRECT OR CONTRIBUTORY PATENT OR COPYRIGHT AND OF ALL THE REMEDIES OF BUYER RELATING TO ANY CLAIMS, SUITS, OR PROCEEDINGS INVOLVING PATENTS AND COPYRIGHTS.

**11. Changes in Work.** Siemens shall not implement any changes in the scope of work unless Buyer and Siemens agree in writing to the details of the change and any resulting price, schedule or other contractual modifications. Any change to any law, rule, regulation, order, code, standard or requirement which requires any change hereunder shall entitle Siemens to an equitable adjustment in the prices and any time of performance.

**12. Non-waiver of Default.** Each shipment made hereunder shall be considered a separate transaction. In the event of any default by Buyer, Siemens may decline to make further shipments. If Siemens elects to continue to make shipments, Siemens' actions shall not constitute a waiver of any default by Buyer or in any way affect Siemens' legal remedies for any such default. Any waiver of Siemens to require strict compliance with the provisions of this contract shall be in writing and any failure of Siemens to require such strict compliance shall not be deemed a waiver of Siemens' right to insist upon strict compliance thereafter.

**13. Final Written Agreement; Modification of Terms.** These terms, together with any quotation, purchase order or acknowledgement issued or signed by Siemens, comprise the complete and exclusive agreement between the parties (the "Agreement") and supersede any terms contained in Buyer's documents, unless separately signed by Siemens. These terms may only be modified by a written instrument signed by authorized representatives of both parties.

**14. Assignment.** Neither party may assign the Agreement, in whole or in part, nor any rights or obligations hereunder without the prior written consent of the other; provided however that Siemens may assign its rights and obligations under these terms to its affiliates and Siemens may grant a security interest in the Agreement and/or assign proceeds of the Agreement without Buyer's consent.

**15. Applicable Law and Jurisdiction.** These terms is governed and construed in accordance with the laws of the State of Delaware, without regard to its conflict of laws principles. The application of the United Nations Convention on Contracts for the International Sale of Goods is excluded. **BUYER WAIVES ALL RIGHTS TO A JURY TRIAL IN ANY ACTION OR PROCEEDING RELATED IN ANY WAY TO THESE TERMS.**

**16. Severability.** If any provision of these terms is held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions will not in any way be affected or impaired, and such provision will be deemed to be restated to reflect the original intentions of the parties as nearly as possible in accordance with applicable law.

**17. Export Control.** Buyer acknowledges that Siemens is required to comply with applicable export laws and regulations relating to the sale, exportation, transfer, assignment, disposal and usage of the goods provided under this agreement, including any export license requirements. Buyer agrees that such goods shall not at any time directly or indirectly be used, exported, sold, transferred, assigned or otherwise disposed of in a manner which will result in non-compliance with such applicable export laws and regulations. It shall be a condition of the continuing performance by Siemens of its obligations hereunder that compliance with such export laws and regulations be maintained at all times. **BUYER AGREES TO INDEMNIFY, DEFEND AND HOLD SIEMENS HARMLESS FROM ANY AND ALL COSTS, LIABILITIES, PENALTIES, SANCTIONS AND FINES RELATED TO NON-COMPLIANCE WITH APPLICABLE EXPORT LAWS AND REGULATIONS.**

**10. Compliance with Laws.** Buyer agrees to comply with all applicable laws and regulations relating to the purchase, resale, exportation, transfer, assignment, disposal or use of the goods.

**18. Nuclear.** Buyer represents and warrants that the goods covered by this agreement shall not be used in or in connection with a nuclear facility or application. If Buyer is unable to make such representation and warranty, then Buyer agrees to indemnify and hold harmless Siemens and to waive and require its insurers to waive all right of recovery against Siemens for any damage, loss, destruction, injury or death resulting from a "nuclear incident", as that term is defined in the Atomic Energy Act of 1954, as amended, whether or not due to Siemens's negligence.

**19. Asbestos - Federal Law** requires that building or facility owners identify the presence, location and quantity of asbestos containing materials (hereinafter "ACM") at work sites. Siemens is not licensed to abate ACM. Accordingly, prior to (a) commencement of work at any site under a specific Purchase Order, or (b) a change in the work scope of any Purchase Order, Buyer will certify that the work area associated with Siemens' scope of work under said Purchase Order, Change Order, or either of them, is free of ACM.

**20. Confidentiality.** (a) During the term of this Agreement and thereafter, Buyer shall treat as confidential all information obtained by him/her for and from Siemens and all information compiled or generated by him/her under this Agreement for Siemens including, but not limited to, business information, manufacturing information, technical data, drawings, flow charts, program listings, software code, and other software, plans and projections. Buyer shall not disclose or refer to the work to be performed under this Agreement in any manner which would identify Siemens without the advance written permission of Siemens.

(b) Nothing, however, in this Agreement shall obligate Buyer to treat as confidential any information which: (i) is or becomes generally known to the public, without the fault of the Buyer; (ii) is disclosed to Buyer, without obligation of confidentiality, by a third party having the right to make such disclosure; (iii) was previously known to Buyer, without obligation of confidentiality, which fact can be demonstrated by means of documents which are in the possession of Buyer upon the date of this Agreement; or (iv) is required to be disclosed by law, except to the extent eligible for special treatment under an appropriate protective order, provided that Buyer shall promptly advise Siemens of any requirement to make such disclosure to allow Siemens the opportunity to obtain a protective order and assist Siemens in so doing.

(c) It is Siemens' policy not to unlawfully or improperly receive or use confidential information, including trade secrets, belonging to others. This policy precludes Siemens from obtaining, directly or indirectly from any employee, Buyer, or other individual rendering services to Siemens confidential information of a prior employer, client or any other person which such employee, Buyer, or individual is under an obligation not to disclose. The Buyer agrees to abide by this policy.

#### **SOFTWARE LICENSE / WARRANTY ADDENDUM - SIEMENS INDUSTRY, INC. ("SIEMENS") POWER TRANSMISSION DIVISION**

**This Addendum applies to software furnished by Siemens and replaces the Limited Warranty provisions of Siemens' Standard Terms and Conditions of Product Sale and Services. All other terms and conditions contained in Siemens' Standard Terms and Conditions of Product Sale and Services are unaffected by this Addendum.**

**1. Software License, Warranty, Fees.** (a) Siemens hereby grants to Buyer: a non-exclusive, non-transferable right to use the computer software program licensed under this Contract in machine-readable, object code form and any modifications made by Siemens thereto ("Software"), but only in connection with the configuration of the goods and operating system for which the Software is ordered and for the end-use purpose stated in the related Siemens operating documentation. Buyer agrees that neither it nor any third party shall modify, reverse engineer, decompile or reproduce the Software, without Siemens's prior written consent, except for making a single copy for backup or archival purposes in accordance with the related Siemens operating documentation, and provided that Siemens's confidential and proprietary legend is included. Except to the extent that the parties otherwise agree in writing, Buyer's license to use the copy of such Software shall terminate upon breach of this license or the Contract by Buyer, including, without limitation, breach of payment or confidentiality obligations. All copies of the Software are the property of Siemens, and all copies for which the license is terminated shall be returned to Siemens promptly after termination.

(b) Siemens may authorize Buyer (such as a Siemens distributor or original equipment manufacturer) to transfer this software license and warranty to a third party ("Siemens-authorized transferee"). Such authorization to transfer shall be in writing and signed by a Siemens authorized representative. Siemens-authorized transferee shall have the same rights and obligations as Buyer, except it shall not have the right to transfer such license.

(c) Siemens warrants that on the date of shipment of the Software only to Buyer or Buyer's Siemens-authorized transferee hereunder that: (1) the Software media contain a true and correct copy of the Software and are free from material defects; (2) Siemens has the right to grant the license hereunder; and (3) the Software will function substantially in accordance with the related Siemens operating documentation. Siemens disclaims any warranty that the operation of the Software will be uninterrupted or error free. This warranty does not apply to software delivered by Siemens but produced by others. The warranty for software produced by others shall be the warranty as stated by the software producer.

(d) If within one (1) year from date of initial installation (but not more than eighteen (18) months from date of shipment by Siemens to Buyer) of Software, Buyer or its Siemens-authorized transferee hereunder discovers that the Software is not as warranted above and promptly notifies Siemens in writing, within this period of time, of the nonconformity, and if Siemens cannot correct the nonconformity or deems correction to be commercially impracticable or prohibitively expensive, Buyer's and Buyer's Siemens-authorized transferee's exclusive remedies, at Siemens's option and expense, are: (1) replacement of the nonconforming Software; or (2) termination of this license and a refund of an equitable, pro rata share of the Contract price or license fee paid.

(e) This warranty will apply for the period specified in (d) above, provided that: (1) the Software is not modified, changed, or altered by anyone other than Siemens or its suppliers, unless authorized by Siemens in writing; (2) there is no change by anyone other than Siemens to the goods for which the Software is ordered; (3) the goods are in good operating order and are installed in a suitable operating environment; (4) the nonconformity is not caused by Buyer, Buyer's Siemens-authorized transferee, or any of their agents, servants, employees, or contractors, or any third party; (5) Buyer or Buyer's Siemens-authorized transferee promptly notifies Siemens in writing, within the period of time set forth in (d) above, of the nonconformity after it is discovered; and (6) all fees for the Software due to Siemens have been paid. **SIEMENS HEREBY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WITH REGARD TO THE SOFTWARE, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF DEALING AND USAGE OF TRADE.**

(f) Buyer and successors of Buyer are limited to the remedies specified in this Section and shall have no others for a nonconformity in the Software. Buyer agrees that these remedies provide Buyer and its successors with a minimum adequate remedy and are their exclusive remedies, whether Buyer's or successors' remedies are based on contract, warranty, tort (including negligence), strict liability, indemnity, or any other legal theory, and whether arising out of warranties, representations, instructions, operating documentation, installations, or non-conformities from any cause.

(g) Unless otherwise provided in this Contract, the fees for this Software license are included in the purchase price of the goods. Any subsequent modifications or enhancements to the Software made by Siemens are, at Siemens's option, subject to a fee.