

TECHNICAL SUPPORT, SERVICE, MAINTENANCE AND COMMISSIONING

A. Charge Rates and General Conditions

(Based upon the Electronics Industry ANIE standard conditions and rates.)

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| 1. | Normal Day | Up to 8 hours any day, between hours of 09.00 to 17.00 (or pre-scheduled with a regular 8 hours shift). Hours in excess of 8 will be charged at the appropriate overtime rate. |
| 2. | Overtime | Up to 8 hours in excess of the 8 hours normal working day. |
| 3. | Excess Overtime | All hours worked in excess of the 8 hours overtime in any day or after 6 days in succession unless otherwise agreed. |

B. Travel, Hotel, Accommodation and Subsistence

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| 1. | a) Travel | Travel cost from the personnel's base to Job-Site Area. |
| | b) Local Travel | All local travel costs to and from job site |
| | c) Accommodation | Accommodation and Subsistence at Job-Site area. |
| | d) Expenses | Incidental expenses during travel |

NOTE We reserve the right to add a 5% handling fee to the above items where costs have been charged to a Credit Card, for foreign currency expenses and where we allow credit facilities to customers.

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| 2. | Travel Time | Charged at the rate applicable for the day and time of day unless stated otherwise. |
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C. Miscellaneous Items

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| 1. | Stand-by Time | When any of our personnel are asked by a customer to remain available to complete an assignment, and thus not available for other duties due to stand-by, on-call or short notice call out, such availability time will be considered active service time at the rate applicable for the day and time of day. |
| 2. | Allied Services | Allied technical services - whether included in the order or by separate contract, are restricted to technical guidance and/or technical support of on-site activities and as such are intended to complement services supplied by the customer. We will co-ordinate any additional services as may be required and contract for same, if needed, in writing. |
| 3.* | Missing Equipment | We will invoice at replacement cost for any tools and test equipment provided by us that are confiscated, lost, or damaged due to causes beyond our control either in transit or on site. |

D. Rates for General Engineer - UK Locations

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| 1. | Monday to Friday
Normal day rate
8 hours working day | £890.00 per day |
| 1a. | Overtime Rate
Next 8 hours
In excess of 8 hour working day | £139.00 per hour. |
| 1b. | Excess overtime rate
In excess of 8 hours of overtime | £167.00 per hour |
| 2. | Weekends
Normal day rate
8 hours working day | £1,112.00 per day |
| 2a. | Overtime Rate
Next 8 hours
In excess of 8 hour working day | £174.00 per hour. |
| 2b. | Excess overtime rate
In excess of 8 hours of overtime | £208.00 per hour |
| 3. | Travel time | Charged at the actual day rate |
| 4. | Travel and subsistence | Actual cost + 5% |
| 5. | Engineer Mileage | £0.70 per mile, calculated from MK14 6LS |
| 6. | Emergency call-out charge | £250.00 for response requested within 8 hours
or aborted call out request |
| 7. | A surcharge of 30% on the rates in section D and section E would apply for the services of a Specialist Engineer, Design Engineer or Consulting Engineer as appropriate. | |
| 8. | A surcharge of 10% on the rates shown in section D and section E would apply to the UK factory based engineers assigned to duties in the Middle East and Far East site locations. Assignments in Afghanistan, Iraq and all locations with a red or yellow UK Government travel advisory warning would be considered as separate arrangements with pricing available on request. For the avoidance of doubt this shall be judged using the UK government's website:
https://www.gov.uk/foreign-travel-advice/ | |

**Minimum charge is half day (1-4 hours) at one half day rate, and this needs to include travel time*

E. Rates for General Engineer - Overseas Locations

(Extracted from ANIE National Federation of Electro technical and Electronic Engineers Tariff. Issue date: 6 June 2009 Sheet Code N1- Section III, column B.)

1. Monday to Friday €1,200.00 per day
Normal day rate
8 hours working day
- 1a. Overtime Rate €188.00 per hour.
Next 8 hours
In excess of 8 hour working day
- 1b. Excess overtime rate €225.00 per hour
In excess of 8 hours of overtime
2. Saturdays €1,500.00 per day
Normal day rate
8 hours working day
- 2a. Overtime Rate €235.00 per hour.
Next 8 hours
In excess of 8 hour working day
- 2b. Excess overtime rate €281.00 per hour
In excess of 8 hours of overtime
3. Travel time Charged at the actual day rate for the first 8 hours and then at €188.00 per additional hour
4. Travel and subsistence Actual cost + 5%
5. A surcharge of 30% on the rates in section D and section E would apply for the services of a Specialist Engineer, Design Engineer from the factory or for a Consulting Engineer for training duties as appropriate to the project or RF , a detailed cost quotation should be requested.
6. A surcharge of 10% on the rates shown in section D and section E would also apply to the UK factory based engineers assigned to duties in the Middle East and Far East site locations. Assignments in Afghanistan, Iraq and all locations with a red or yellow UK Government travel advisory warning would be considered as separate arrangements with pricing available on request. For the avoidance of doubt this shall be judged using the UK government's website: <https://www.gov.uk/foreign-travel-advice/>
7. Emergency call out requests from maintenance contract customers for site attendance of a specialist engineer will normally be mobilised within 5 working days from date of acknowledged call out. Formal requests shall be on the customer's headed Purchase Order paper referring to a valid quotation or directly relating to these technical support charges. An emergency call out supplement of 10% will apply to the rates shown.

F. Note Regarding Commissioning and On-Site Testing

Commissioning is confined to examining and starting up our supplied equipment including providing basic operating instruction for the user and formally handing over the equipment. Where we provide batteries, our engineer will be available to monitor the battery charging and discharge cycle to ensure the critical load will be supported for the prescribed stand-by time.

We shall not be held responsible for:

- (a) The standard of or quality or accuracy of installation work undertaken by other parties.*
- (b) Correction of installation work done by others.*
- (c) Making off any power cable connections.*
- (d) Making off battery connections.*

** Unless this work is included in a separate installation sub contract with us.*

Permanent mains power must be available on site, the load or load bank provided by the user and battery must be connected in order for our engineer to conduct functional load tests on site.

Our engineer is obviously available to assist with related work at his discretion in order to reduce waiting time to a minimum if for any reason the site is not ready for commissioning. Waiting time will be charged at the rates as shown plus additional living expenses and travel costs.

Customer familiarisation and product briefing would normally be done during the time whilst batteries are being charged.

G. Design, Engineering Consultancy & Customer Training

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| a). | Instruction | In customers' classroom with instruction material furnished by the equipment manufacturer and Power Systems International. Typical training session is 2 days per system type. Time is charged at the rates shown in the section E plus £90 (€EUR 108) per pupil for materials. Individual specific product manuals will be charged at £110 (€EUR 132) each. |
| b). | Preparation Time | One day of preparation time plus visa application charges where necessary when undertaking training duties in overseas locations is £890 (or €EUR1,200). |

Note: The Consulting Engineers surcharge on the rates stated in sections D and E will apply to customer training and consultancy work undertaken outside of the United Kingdom.

All non UK work and work undertaken by factory based engineers will be charged in € Euro currency unless stated otherwise in our documentation and quotations.

H. Notes

1. Requests for ad hoc, technical support, engineering consultancy, commissioning, routine service, maintenance, inspection, product familiarization, customer and client training should be made by means of a request for quotation.
2. A formal quotation will detail the cost structure for the proposed work, instruction to proceed shall be by means of a purchase order and signed by an authorised person noting acceptance of the written quotation from Power Systems International Limited.
3. The order will be acknowledged showing the appropriate rates and charges with a mutually agreed date for the commencement of the scheduled work as detailed. For customers requesting maintenance and technical support services in export territories a stage payment or advance payment terms and conditions or payment security arrangements may be required.
4. Aborted arrangements and diversions from scheduled arrangements or cancellation without an acceptable period of notice shall result in consequential penalty costs being charged to the customer in the event that our engineer cannot be assigned to other alternative duties.
5. For non contract customers we require a purchase order giving 30 working days notice for the commencement date of maintenance and technical support services.
6. Contract customers are required to provide advance visit scheduling with 10 clear working days notice of any changes if dates have to be changed. We will also give 10 working days notice of any changes to the visit schedule and confirm such agreed changes in writing.

J. Training: Typical Class Outline

1. Review of customer's system using actual product manual
 - A. Detailed description of sub assemblies and modules.
 - B. Setting up and operation of system.
 - C. Alarms and their set-points
 - D. Metering points and types.
 - E. Topology of system
2. Historical/Technical background on the Systems
Comparison of different topologies used in system designs.
3. Review of Power semi conductor devices and definitions

Comparisons between Thyristor, GTO, Transistor and IGBT devices and their effect on power conversion systems designs.
4. Rectifier
 - A. Power stage block diagram
 - B. Detailed power stage operation, 6 pulse and 12 pulse bridges.
 - C. Basic logic block diagram
 - D. Logic card descriptions
 - a) Logic power supply
 - b) Control
 - c) Device driver cards
 - d) Monitoring logic
 - e) Alarms and status indicating logic
 - f) Other/Misc.
 - g) Remote alarm interface.
 - h) Data logging and event recording.

5. Inverter
 - A. Power stage block diagram
 - B. Detail of power stage operation
 - C. Basic logic block diagram
 - D. Logic card descriptions
6. Static bypass transfer switch
 - A. Power Stage Operation
 - B. Logic Block Diagram
 - C. Detailed Logic Operation
 - D. Comparison of Types
7. Battery
 - A. Battery Types.
 - a) VRLA
 - b) Vented LA
 - c) NiCd
 - B. Charge Characteristics
 - C. Discharge Test and Characteristics

K. Factory Visits

Progress inspection visits to the factory without prior notification can be disruptive and costly to us in terms of lost production time and management time. We reserve the right to charge for such disruptive inspection visits, we require 7 working days written notice to make arrangements and, where this is acceptable by the factory, it will be acknowledged accordingly.

FACTORY TESTING OF POWER CONVERSION PRODUCTS

All our products are subjected to standard factory tests following IEC 146 and the format of our standard test is set out in the certificate. We are prepared to receive customers' inspectors to witness the repeat of our standard factory tests as a supplementary to our routine factory testing procedure, a charge is made for this service in accordance with section E.

The normal factory tests would include a discharge test using any available battery or an appropriate alternative DC power source. It would not be possible to receive batteries from customers' suppliers without incurring handling costs for unpacking, assembly, disassembly, repacking and the return shipment of a fully charged battery. This procedure would be unsafe, would not be cost effective and should be avoided.

We would recommend that customers should consider attending supplementary tests at the factory and this should be done within 5 days of our notifying you that standard works tests have been scheduled in order to keep to the absolute minimum the period the equipment would occupy valuable factory floor space.

The charge made for witnessing supplementary tests with extended heat run load tests is €EU80 per kVA per day per system type and there would be a requirement to have a technician engineer in attendance at a cost of €1,200.00 per day.

Type testing and any supplementary testing in environmental chambers, shock, vibration, NATO and EMC would be undertaken at costs to be obtained from specialist laboratories on request. Standard documentation, certified test results and certificate of conformance would be issued in relation to the equipment subjected to these tests.

TYPE TESTING AND ACCEPTANCE TESTS

Type tests, external laboratory tests, special acceptance tests in the factory, long duration load testing and formal acceptance tests would be charged for in addition to the standard factory testing and supplementary witnessed factory testing above. A cost supplement for this service should be requested prior to placing purchase orders.

CUSTOM DOCUMENTATION PROVISION

All our equipment would be provided with standard documentation package including operators' manual, as built parts lists, mechanical outlines, drawings, basic functional schematic diagrams, trouble shooting material, operators' instructions, test certificates and a Certificate of Conformance to fulfill our obligations under the ISO9000:2015 protocol.

Non-standard, special documentation will be charged for on a preparation time and material basis, this charge could be quite substantial, especially where custom engineered products are concerned and quotations should be sought from us prior to placing orders for such equipment.

ACCEPTANCE

After completion of factory tests or, where applicable, according to contract, after the installation of equipment, a signed acceptance report describing start-up and on-site load testing or site visit report would be furnished with the invoice for the commissioning service.

DELIVERY EX-WORKS

The equipment, when delivered ex works in accordance with INCO terms, unless otherwise stated, would be fixed to wooden pallet or skid frame suitable for fork lift truck handling. The equipment would be covered with clear plastic sheeting.

Export packing for sea freight, air freight or overland transportation will be in accordance with our standard packing specification or the packing specification of the purchaser as requested. A charge would be made in our quotations, on request, to include specific packaging requirements to suit the intended freight service.

SITE CONDITIONS

The equipment is suitable for installation indoors with ambient temperatures from 0 to 40°C and relative humidity from 0 to 95%. The recommended ambient operating temperature for equipment incorporating standard lead acid batteries is 23°C, especially where battery enclosures have valve regulated maintenance free, lead acid batteries installed.

TECHNICAL SUPPORT

A fully comprehensive after sales service, with maintenance, spare parts and technical support facility is provided in the UK, Europe, Middle East, Africa and the West Indies through local maintenance contracts.

Further details are available on request from our Milton Keynes office at the address and contact details as shown at the end of this document.

LOCAL TAXES AND DEDUCTIONS

All charges are the amounts to be paid. Power Systems International will NOT be responsible for any local withholding taxes or deductions. In the event that local law requires these to be withheld by the customer and paid over to the relevant tax authority, Power Systems International reserves the right to increase charges to reflect these local taxes and deductions.

K. Contact Details

For more clarification or for a specific quotation, where possible, please contact:

Marta Vidal - marta.vidal@powersystemsinternational.com

Paul Berry - paul.berry@powersystemsinternational.com

Or call the office on +44 (0) 1494 871 544

L. Customer Terms and Conditions

This document should be read in conjunction with our Terms and Conditions as copy of which can be found at <https://www.powersystemsinternational.com/about-us/terms-conditions/>. In the event of a conflict the terms and conditions will take precedence.