



# El Dorado County Master Report

330 Fair Lane, Bldg A.  
Placerville, California  
530 621-5390  
FAX 622-3645  
co.el-dorado.ca.us/bos

File Number: 06-1428

<b>File ID:</b> 06-1428	<b>Type:</b> Agenda Item	<b>Status:</b> Approval Pending
<b>Version:</b> 1	<b>Reference:</b>	<b>In Control:</b> Board Of Supervisors
		<b>Created:</b> 09/05/2006

**Agenda Title:** Libert Global Services

**Final Action:**

**Title:** [Information Technologies] recommending [Board approve Amendment I to Agreement # 411-S0610 with Liebert Global Services to provide maintenance for the Uninterruptible Power Supply (UPS) equipment for Information Technologies Department, extending term by one (1) year ending 10/20/2007 and increasing compensation by \$6359 with an amount not to exceed \$ 12,415.00 for the two year period.

**RECOMMENDED ACTION:** Approve

**FUNDING:** General Fund

**Notes:** Recommend approval.  
Laure A Hill 9/10/06

**Sponsors:**

**Enactment Date:**

**Attachments:** Blue Route

**Enactment Number:**

**Same:**

**Hearing Date:** 9/19

**Contact:** becky.stiles@edcgov.us

**Next Meeting Date:**

### History of Legislative File

Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
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C 9/17/06 Kelly Webb

Agmt available in Clerk's packet or on Web.

### Approval History

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Version	Date	Approver	Action
1	09/06/2006		Approved
<b>Notes</b>	Minor editing changes		
1	09/06/2006		Approved
1	09/06/2006		Delegate
1	09/07/2006		Approved
<b>Notes</b>	Consent; County counsel approved with comment; Risk Management approved.		
1	09/08/2006		Approved
<b>Notes</b>	Recommend approval.		

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### History of Legislative File

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Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
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**Text of Legislative File 06-1428**

Information Technologies recommending the Board approve Amendment I to Agreement # 411-S0610 with Liebert Global Services to provide maintenance for the Uninterruptible Power Supply (UPS) equipment for the Information Technologies Department, extending term by one (1) year ending 10/20/2007 and increasing compensation by \$6359 with an amount not to exceed \$12,415.00 for the two year period.

**RECOMMENDED ACTION:** Approve

**FUNDING:** General Fund

Background: Liebert Global Services has maintained El Dorado County's UPS System for many years. This Amendment is to mutually extend the current agreement by one year.

Reason for Recommendation: Information Technologies is recommending an extension for the maintenance agreement for the UPS system. This UPS system supports our IBM Mainframe that currently runs our M204 Property System Management System, Payroll, and FAMIS accounting systems, as well as the enterprise and some departmental servers. All of these software programs / computers are critical for County day-to-day operations.

County Counsel and Information Technologies wish to apprise the Board of non-standard indemnity language within this agreement regarding Consequential Damages found on page 5 of 9, Article XI. This language was present when the original agreement was approved in November, 2005.

Fiscal Impact/Change to Net County Cost: Funds are budgeted in Information Technologies FY 06/07 maintenance budget.

Action to be taken following Board approval: Purchasing Agent will encumber funds for the FY 06/07 maintenance amount of \$6359.00

# CONTRACT ROUTING SHEET

Date Prepared: 7/27/06

Need Date: \_\_\_\_\_

### PROCESSING DEPARTMENT:

Department: CAO/Proc. & Contracts  
Dept. Contact: Pam Carlone  
Phone #: 5833  
Department Head Signature: Pam Carlone  
*For Bonnie H. Rich*

### CONTRACTOR:

Name: Liebert Global Services  
Address: 610 Executive Campus Drive  
Westerville, OH 43082  
Phone: 614-841-6607

### CONTRACTING DEPARTMENT: Information Technologies

Service Requested: Maintenance of UPS System  
Contract Term: Expires 10/20/07 Amendment Value: \$6,359.00

Compliance with Human Resources requirements? Yes: \_\_\_\_\_ No: \_\_\_\_\_  
Compliance verified by: \_\_\_\_\_

### COUNTY COUNSEL: (Must approve all contracts and MOU's)

Approved: \_\_\_\_\_ Disapproved: \_\_\_\_\_ Date: 7/31/06 By: Quality Ken  
Approved: \_\_\_\_\_ Disapproved: \_\_\_\_\_ Date: \_\_\_\_\_ By: \_\_\_\_\_

ASSIGNMENT  
DATE 02/28/2006  
ATTORNEY W. B. H. K. B. H.  
DEPT./INDEX NO. 02/28/06  
BY: \_\_\_\_\_

*Please approve Board of non-standard indemnity language - no consequential damages*

PLEASE FORWARD TO RISK MANAGEMENT. THANKS!

### RISK MANAGEMENT: (All contracts and MOU's except boilerplate grant funding agreement)

Approved:  Disapproved: \_\_\_\_\_ Date: 8/1/06 By: J. Costello  
Approved: \_\_\_\_\_ Disapproved: \_\_\_\_\_ Date: \_\_\_\_\_ By: \_\_\_\_\_

AUG 01 2006

### OTHER APPROVAL: (Specify department(s) participating or directly affected by this contract).

Departments: \_\_\_\_\_  
Approved: \_\_\_\_\_ Disapproved: \_\_\_\_\_ Date: \_\_\_\_\_ By: \_\_\_\_\_  
Approved: \_\_\_\_\_ Disapproved: \_\_\_\_\_ Date: \_\_\_\_\_ By: \_\_\_\_\_

# ORIGINAL

## AGREEMENT FOR SERVICES #411-S0610 AMENDMENT I

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This Amendment I to that Agreement for Services #411-S0610, made and entered into by and between the County of El Dorado, a political subdivision of the State of California (hereinafter referred to as "County"), and Liebert Global Services, Inc., a Delaware Corporation, duly qualified to conduct business in the State of California, whose principal place of business is 610 Executive Campus Drive, Westerville, OH 43082; (hereinafter referred to as "Contractor"); with their Agent for Service of Process being C T Corporation System, 828 West Seventh Street, Los Angeles, CA 90017.

### WITNESSETH

**WHEREAS**, Contractor has been engaged by County to provide maintenance for the Uninterruptible Power Supply (UPS) equipment for Information Technologies, in accordance with Agreement for Services #411-S0610, dated November 14, 2005, incorporated herein and made by reference a part hereof; and

**WHEREAS**, the parties hereto have mutually agreed to extend the term of said Agreement for one (1) additional year, hereby amending **ARTICLE II – Term** and **ARTICLE III - Compensation for Services**; and

**NOW THEREFORE**, the parties do hereby agree that Agreement for Services #411-S0610 shall be amended a first time as follows:

#### **ARTICLE II**

**Term:** This Agreement, as amended, shall become effective when fully executed by both parties hereto and shall cover the period of October 21, 2005 through October 20, 2007.

#### **ARTICLE III**

**Compensation for Services:** For services provided herein, County agrees to pay Contractor the sum of \$1,514.00 quarterly in advance for the period of October 21, 2005 through October 20, 2006. For the period of October 21, 2006 through October 20, 2007, County agrees to pay Contractor the sum of \$1,589.75 quarterly in advance. Payments shall be made within thirty (30) days following the County's receipt and approval of itemized invoice(s) detailing services rendered.

For the purposes hereof, the billing rates shall be as follows:

For the period of October 21, 2005 through October 20, 2006:

Model #AP515	\$1,622.00/yearly
Model #PRC12110X	\$3,242.00/yearly
Model #PPA125C	\$1,192.00/yearly

For the period of October 21, 2006 through October 20, 2007:

Model #AP515	\$1,703.00/yearly
Model #PRC12110X	\$3,404.00/yearly
Model #PPA125C	\$1,252.00/yearly

The total amount of this Agreement shall not exceed \$12,415.00 for the two (2) year term.

Except as herein amended, all other parts and sections of that Agreement #411-S0610 shall remain unchanged and in full force and effect.

**Requesting Contract Administrator Concurrence:**

By: Steve Featherston Dated: 8-2-2006  
Steve Featherston, Assistant Director  
Information Technologies

**Requesting Department Head Concurrence:**

By: Jacqueline Nilius Dated: 8/2/06  
Jacqueline Nilius, Director  
Information Technologies

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IN WITNESS WHEREOF, the parties hereto have executed this First Amendment to Agreement #411-S0610 the day and year first below written.

--- COUNTY OF EL DORADO ---

Dated: \_\_\_\_\_

By: \_\_\_\_\_

Chairman  
Board of Supervisors  
"County"

ATTEST:  
Cindy Keck, Clerk  
of the Board of Supervisors

By: \_\_\_\_\_ Date: \_\_\_\_\_

Deputy Clerk

-- CONTRACTOR --

Dated: 8.23.06

LIEBERT GLOBAL SERVICES, INC.  
A DELAWARE CORPORATION

By:  \_\_\_\_\_

Lauri V. Turevon  
Vice-President  
"Contractor"

COPY  
ORIGINAL

AGREEMENT FOR SERVICES #411-S0610

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**THIS AGREEMENT** made and entered by and between the County of El Dorado, a political subdivision of the State of California (hereinafter referred to as "County") and Liebert Global Services, Inc., a Delaware Corporation, duly qualified to conduct business in the State of California, whose principal place of business is 610 Executive Campus Drive, Westerville, OH, 43082; (hereinafter referred to as "Contractor"); with their Agent for Service of Process being C T Corporation System, 818 West Seventh Street, Los Angeles, CA 90017.

**WITNESSETH**

**WHEREAS**, County has determined that it is necessary to obtain a Contractor to provide maintenance for the Uninterruptible Power Supply (UPS) equipment for Information Technologies; and

**WHEREAS**, Contractor has represented to County that it is specially trained, experienced, expert and competent to perform the special services required hereunder and County has determined to rely upon such representations; and

**WHEREAS**, it is the intent of the parties hereto that such services be in conformity with all applicable federal, state and local laws; and

**WHEREAS**, County has determined that the provisions of these services provided by Contractor are in the public's best interest and that these services, are more economically and feasibly performed by outside independent Contractors as well as authorized by El Dorado County Charter, Section 210 (b) (6) and/or Government Code 31000;

**NOW, THEREFORE**, County and Contractor mutually agree as follows:



## **ARTICLE I**

**Scope of Services:** Contractor agrees to furnish personnel and equipment necessary to provide maintenance for the Uninterruptible Power Supply (UPS) equipment for the Information Technologies. Services shall include, but not be limited to, those described in Exhibit "A", marked "Scope of Work", incorporated herein and made by reference a part hereof.

## **ARTICLE II**

**Term:** This Agreement shall become effective when fully executed by both parties hereto and shall cover the period of October 21, 2005 through October 20, 2006.

## **ARTICLE III**

**Compensation for Services:** For services provided herein, County agrees to pay Contractor the lump sum of \$1,514.00 quarterly in advance. Payment shall be made within thirty (30) days following County receipt and approval of itemized invoice(s) detailing services rendered. For the purposes hereof, the billing rates shall be as follows:

Model # AP515	\$1,622.00/yearly
Model #PRC12110X	\$3,242.00/yearly
Model #PPA125C	\$1,192.00/yearly

The total amount of this Agreement shall not exceed \$6,056.00.

## **ARTICLE IV**

**Changes to Agreement:** This Agreement may be amended by mutual consent of the parties hereto. Said amendments shall become effective only when in writing and fully executed by duly authorized officers of the parties hereto.

## **ARTICLE V**

**Contractor to County:** It is understood that the services provided under this Agreement shall be prepared in and with cooperation from County and its staff. It is further agreed that in all matters pertaining to this Agreement, Contractor shall act as Contractor only to County and shall not act as Contractor to any other individual or entity affected by this Agreement nor provide information in any manner to any party outside of this Agreement that would conflict with Contractor's responsibilities to County during term hereof.

## **ARTICLE VI**

**Assignment and Delegation:** Contractor is engaged by County for its unique qualifications and skills as well as those of its personnel. Contractor shall not subcontract, delegate or assign services to be provided, in whole or in part, to any other person or entity without prior written consent of County.

## **ARTICLE VII**

**Independent Contractor/Liability:** Contractor is, and shall be at all times, deemed independent and shall be wholly responsible for the manner in which it performs services required by terms of this Agreement. Contractor exclusively assumes responsibility for acts of its employees, associates and subcontractors, if any are authorized herein, as they relate to services to be provided under this Agreement during the course and scope of their employment.

Contractor shall be responsible for performing the work under this Agreement in a safe, professional, skillful and workmanlike manner and shall be liable for its own negligence and negligent acts of its employees. County shall have no right of control over the manner in which work is to be done and shall, therefore, not be charged with responsibility of preventing risk to Contractor or its employees.

## **ARTICLE VIII**

**Fiscal Considerations:** The parties to this Agreement recognize and acknowledge that County is a political subdivision of the State of California. As such, El Dorado County is subject to the provisions of Article XVI, Section 18 of the California Constitution and other similar fiscal and procurement laws and regulations and may not expend funds for products, equipment or services not budgeted in a given fiscal year. It is further understood that in the normal course of County business, County will adopt a proposed budget prior to a given fiscal year, but that the final adoption of a budget does not occur until after the beginning of the fiscal year.

Notwithstanding any other provision of this Agreement to the contrary, County shall give notice of cancellation of this Agreement in the event of adoption of a proposed budget that does not provide for funds for the services, products or equipment subject herein. Such notice shall become effective upon the adoption of a final budget, which does not provide funding for this Agreement. Upon the effective date of such notice, this Agreement shall be automatically terminated and County released from any further liability hereunder.

In addition to the above, should the Board of Supervisors during the course of a given year for financial reasons reduce, or order a reduction, in the budget for any County department for which services were contracted to be performed, pursuant to this paragraph in the sole discretion of the County, this Agreement may be deemed to be cancelled in its entirety subject to payment for services performed prior to cancellation.

## **ARTICLE IX**

### **Default, Termination and Cancellation:**

- A. Default: Upon the occurrence of any default of the provisions of this Agreement, a party shall give written notice of said default to the party in default (notice). If the party in default does not cure the default within ten (10) days of the date of notice (time to cure), then such party shall be in default. The time to cure may be extended at the discretion of the party giving notice.

Any extension of time to cure must be in writing, prepared by the party in default for signature by the party giving notice and must specify the reason(s) for the extension and the date on which the extension of time to cure expires.

Notice given under this section shall specify the alleged default and the applicable Agreement provision and shall demand that the party in default perform the provisions of this Agreement within the applicable period of time. No such notice shall be deemed a termination of this Agreement unless the party giving notice so elects in this notice, or the party giving notice so elects in a subsequent written notice after the time to cure has expired.

- B. **Bankruptcy:** This Agreement, at the option of the County, shall be terminable in the case of bankruptcy, voluntary or involuntary, or insolvency of Contractor.
- C. **Ceasing Performance:** County may terminate this Agreement in the event Contractor ceases to operate as a business, or otherwise becomes unable to substantially perform any term or condition of this Agreement.
- D. **Termination or Cancellation without Cause:** County may terminate this Agreement in whole or in part seven (7) calendar days upon written notice by County for any reason. If such prior termination is effected, County will pay for satisfactory services rendered prior to the effective dates as set forth in the Notice of Termination provided to Contractor, and for such other services, which County may agree to in writing as necessary for contract resolution. In no event, however, shall County be obligated to pay more than the total amount of the contract. Upon receipt of a Notice of Termination, Contractor shall promptly discontinue all services affected, as of the effective date of termination set forth in such Notice of Termination, unless the notice directs otherwise. In the event of termination for default, County reserves the right to take over and complete the work by contract or by any other means.

## **ARTICLE X**

**Notice to Parties:** All notices to be given by the parties hereto shall be in writing and served by depositing same in the United States Post Office, postage prepaid and return receipt requested. Notices to County shall be addressed as follows:

COUNTY OF EL DORADO  
INFORMATION TECHNOLOGIES  
360 FAIR LANE  
PLACERVILLE, CA 95667  
ATTN: STEVE FEATHERSTON, ASSISTANT DIRECTOR

or to such other location as the County directs.

Notices to Contractor shall be addressed as follows:

LIEBERT GLOBAL SERVICES, INC.  
610 EXECUTIVE CAMPUS DRIVE  
WESTERVILLE, OH 43082

or to such other location as the Contractor directs.

#### **ARTICLE XI**

**Indemnity:** As to Contractor provided services, Contractor agrees to protect, defend (using counsel selected and compensated by Liebert), hold harmless, and indemnify Customer from and against third party claims for bodily injury including death, or property damage to the extent caused by the negligence of Contractor's employees, agents, or subcontractors. In no event shall Liebert's liability exceed the total charges paid by Customer for maintenance plan services or other services provided hereunder. Contractor indemnification shall be reduced to the extent injury or property damage is caused by others.

Such indemnification shall extend to claims initiated within two (2) years from the last date of services provided hereunder. Contractor indemnification is conditioned upon: (a) County provision of timely notification of claim and all relevant documentation and assistance and (b) Contractor assumption of the claim defense to include the right to oppose or settle same at its sole discretion.

Consequential Damages: In no event shall Contractor assume any liability for indirect, special, incidental, exemplary or economic consequential damages of any kind whatsoever including, without limitation, loss of use, data, profit, or revenue, loss or damage to property equipment, or business interruption arising as a result of Contractor's performance of this Agreement, whether any claim is based upon theories of infringement, warranty, contract, negligence, strict liability, tort or otherwise.

The foregoing limitation is not meant to limit Contractor liability for personal injury or death as a result of performance of services in those jurisdictions where the law does not allow this limitation.

#### **ARTICLE XII**

**Insurance:** Contractor shall provide proof of a policy of insurance satisfactory to the El Dorado County Risk Manager and documentation evidencing that Contractor maintains insurance that meets the following requirements:

- A. Full Worker's Compensation and Employer's Liability Insurance covering all employees of Contractor as required by law in the State of California.
- B. Commercial General Liability Insurance of not less than \$1,000,000.00 combined single limit per occurrence for bodily injury and property damage.
- C. Automobile Liability Insurance of not less than \$500,000.00 is required in the event motor vehicles are used by the Contractor in the performance of the Agreement.

- D. In the event Contractor is a licensed professional, and is performing professional services under this Agreement, professional liability is required with a limit of liability of not less than \$1,000,000.00 per occurrence. For the purposes of this Agreement, professional liability is not required.
- E. Contractor shall furnish a certificate of insurance satisfactory to the El Dorado County Risk Manager as evidence that the insurance required above is being maintained.
- F. The insurance will be issued by an insurance company acceptable to Risk Management, or be provided through partial or total self-insurance likewise acceptable to Risk Management.
- G. Contractor agrees that the insurance required above shall be in effect at all times during the term of this Agreement. In the event said insurance coverage expires at any time or times during the term of this Agreement, Contractor agrees to provide at least thirty (30) days prior to said expiration date, a new certificate of insurance evidencing insurance coverage as provided for herein for not less than the remainder of term of the Agreement, or for a period of not less than one (1) year. New certificates of insurance are subject to the approval of Risk Management and Contractor agrees that no work or services shall be performed prior to the giving of such approval. In the event the Contractor fails to keep in effect at all times insurance coverage as herein provided, County may, in addition to any other remedies it may have, terminate this Agreement upon the occurrence of such event.
- H. The certificate of insurance must include the following provisions stating that:
  - 1. The insurer will not cancel the insured's coverage without thirty (30) days prior written notice to County, and;
  - 2. The County of El Dorado, its officers, officials, employees and volunteers are included as additional insured, but only insofar as the operations under this Agreement are concerned. This provision shall apply to all liability policies except worker's compensation and professional liability insurance policies.
- I. The Contractor's insurance coverage shall be primary insurance as respects the County, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the County, its officers, officials, employees or volunteers shall be in excess of the Contractor's insurance and shall not contribute with it.
- J. Any deductibles or self-insured retentions must be declared to and approved by the County, either; the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the County, its officers, officials, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

- K. Any failure to comply with the reporting provisions of the policies shall not affect coverage provided to the County, its officers, officials, employees or volunteers.
- L. The insurance companies shall have no recourse against the County of El Dorado, its officers and employees or any of them for payment of any premiums or assessments under any policy issued by any insurance company.
- M. Contractor's obligations shall not be limited by the foregoing insurance requirements and shall survive expiration of this Agreement.
- N. In the event Contractor cannot provide an occurrence policy, Contractor shall provide insurance covering claims made as a result of performance of this Agreement for not less than three (3) years following completion of performance of this Agreement.
- O. Certificate of insurance shall meet such additional standards as may be determined by the contracting County Department either independently or in consultation with Risk Management, as essential for protection of the County.

#### **ARTICLE XIII**

**Interest of Public Official:** No official or employee of County who exercises any functions or responsibilities in review or approval of services to be provided by Contractor under this Agreement shall participate in or attempt to influence any decision relating to this Agreement which affects personal interest or interest of any corporation, partnership or association in which he/she is directly or indirectly interested; nor shall any such official or employee of County have any interest, direct or indirect, in this Agreement or the proceeds thereof.

#### **ARTICLE XIV**

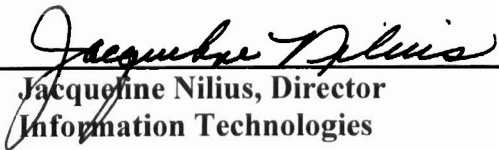
**Interest of Contractor:** Contractor covenants that Contractor presently has no personal interest or financial interest, and shall not acquire same in any manner or degree in either: 1) any other contract connected with or directly affected by the services to be performed by this Agreement; or, 2) any other entities connected with or directly affected by the services to be performed by this Agreement. Contractor further covenants that in the performance of this Agreement no person having any such interest shall be employed by Contractor.

#### **ARTICLE XV**

**California Residency (Form 590):** All independent Contractors providing services to the County must file a State of California Form 590, certifying their California residency or, in the case of a corporation, certify that they have a permanent place of business in California. The Contractor will be required to submit a Form 590 prior to execution of an Agreement or County shall withhold seven (7%) percent of each payment made to the Contractor during term of the Agreement. This requirement applies to any agreement/contract exceeding \$1,500.00.



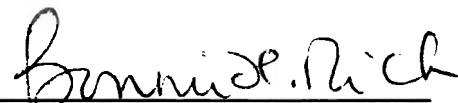
**Requesting Department Head Concurrence:**

By:  Dated: 10/28/05  
Jacqueline Nilus, Director  
Information Technologies

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first below written.

-- COUNTY OF EL DORADO --


Dated: 11/14/05

By:   
Bonnie H. Rich, Purchasing Agent  
Chief Administrative Office  
"County"

-- CONTRACTOR --

Dated: 11/2/05

LIEBERT GLOBAL SERVICES, INC.,  
A DELAWARE CORPORATION

By:   
Lauri V. Turevon  
Vice-President  
"Contractor"





# EXHIBIT "A"



## UNINTERRUPTIBLE POWER SYSTEMS ALL 3-PHASE MODELS SCOPE OF WORK

### ESSENTIAL SERVICE (2)

- Guaranteed 4-hour on-site response, 7 days/week, 24 hours/day, within 50 miles of a Liebert Global Services' Service Center.
- Includes 100% parts (excluding batteries and air filters) coverage.
- Includes 100% labor and travel coverage 7 days/week, 24 hours/day, within the 48 contiguous states and Hawaii.
- Performed by Liebert factory trained Customer Engineers.
- Includes one Semi-Annual and one Annual Preventive Maintenance Service scheduled by the customer between 8am-5pm, Monday-Friday (excluding national holidays).
- Includes 1-800-LIEBERT Customer Response Center.
- Subject to all Terms & Conditions as noted in the Liebert Maintenance Agreement.

### SERVICE PERFORMED

#### UPS Full Preventive Maintenance Service Semi-Annual Service

1. Perform a temperature check on all breakers, connections, and associated controls. Repair and/or report all high temperature areas.
2. Perform a complete visual inspection of the equipment including subassemblies, wiring harnesses, contacts, cables, and major components. Check air filters for cleanliness.
3. Check module(s) completely for the following (if applicable):
4. Rectifier and inverter snubber boards for discoloration.
5. Power capacitors for swelling or leaking oil.
6. DC capacitor vent caps that have extruded more than 1/8".
7. Record all voltage and current meter readings on the module control cabinet or the system control cabinet.
8. Measure and record harmonic trap filter currents.

#### Annual Service Includes the Above, Plus

9. Check the inverter and rectifier snubbers for burned or broken wires.
10. Check all nuts, bolts, screws, and connectors for tightness and heat discoloration.
11. Check fuses on the DC capacitor deck for continuity (if applicable).
12. With customer approval, perform operational test of the system including unit transfer and battery discharge.
13. Calibrate and record all electronics to system specifications.
14. Install or perform Engineering Field Change Notices (FCN) as necessary.
15. Measure and record all low-voltage power supply levels.
16. Measure and record phase-to-phase input voltage and currents.
17. Review system performance with customer to address any questions and to schedule any repairs.

**NOTE 1: Preventive Maintenance usually requires a shut-down to ensure electrical connection integrity.**

**NOTE 2: Customer should check air filters monthly for cleanliness and replace as necessary.**

**NOTE 3: Above maintenance does not include System Control Cabinet, Power Tie, Breaker Cabinets, Load Bus Sync or Maintenance Bypass Cabinets.**

#### Battery Inspection Service - Performed During the UPS Semi-Annual and Annual PM Services

1. Check integrity of battery cabinet (if applicable).
2. Visual inspection of the battery cabinet and/or room to include:
  - Check for NO-OX grease or oil on all connections (if applicable).
  - Check battery jars for proper liquid level (if flooded cells).
  - Check for corrosion on all the terminals and cables.
  - Examine the physical cleanliness of the battery room and jars.
3. Measure and record I.C bus ripple voltage (if applicable).
4. Measure and record total battery float voltage.

**NOTE: The Battery Inspection Service listed above is only a visual inspection and is not intended to replace a full preventive maintenance program for the battery system.**



## SEALED VRLA BATTERIES SCOPE OF WORK

### ESSENTIAL SERVICE (4)

- **Guaranteed 4-hour on-site response, 7 days/week, 24 hours/day, within 150 miles of a Liebert Global Services' Service Center.**
  - **Includes parts, labor and battery jars as required - up to 10% of the battery string per year (not accumulated over contract term).**
  - **Includes battery recycling as required, with documentation meeting EPA requirements.**
  - **Preventive Maintenance Service scheduled by the customer between 8am-5pm, Monday-Friday (excluding national holidays).**
  - **For 3-Phase UPS customers, includes three Quarterly and one Annual PM.**
  - **Performed by Liebert factory trained Battery Specialist or Customer Engineers.**
  - **Subject to all Terms & Conditions as noted in the Liebert Maintenance Agreement.**
- Includes 100% corrective labor and travel coverage 7 days/week, 24 hours/day, within the 48 contiguous states and Hawaii. Does not include labor for full-string replacement.
- Includes 1-800-LIEBERT Customer Response Center.

### SCHEDULED MAINTENANCE PERFORMED

#### Quarterly Service

1. Inspect the appearance and cleanliness of the battery and the battery room. Clean normal cell top dirt accumulation (to be done only with battery off line).
2. Measure and record the total battery float voltage and charging current.
3. Visually inspect the jars and covers for cracks and leakage.
4. Visually inspect for evidence of corrosion.
5. Measure and record the ambient temperature.
6. Verify the condition of the ventilation equipment, if applicable.
7. Verify the integrity of the battery rack/cabinet.
8. Randomly measure and record 10% cell temperatures.
9. Measure and record the float voltage of all cells.
10. Measure and record all internal impedance readings.
11. Provide a detailed written report noting any deficiencies and corrective action needed, taken and/or planned.
12. Verify approval for Battery Life program.

#### Annual Service Includes the Above, Plus

13. Re-tighten all battery connections to the battery manufacturer's specifications.
14. Measure and record all battery connection resistances in micro-ohms, when applicable.

#### Corrective Maintenance Performed as Required

*Refurbish cell connections as deemed necessary by the detailed inspection report.*



**POWER CONDITIONING AND DISTRIBUTION SYSTEMS  
ALL MODELS  
SCOPE OF WORK**

**PREFERRED SERVICE (1)**

- Guaranteed 4-hour on-site response, 7 days/week, 24 hours/day, within 50 miles of a Liebert Global Services' Service Center.
- Includes 100% parts (excluding branch circuit breakers) coverage.
- Includes 100% labor and travel coverage 7 days/week, 24 hours/day, within the 48 contiguous states and Hawaii.
- Performed by Liebert factory trained Customer Engineers.
- Includes one Annual Preventive Maintenance Service scheduled by the customer at the customer's convenience (excluding national holidays).
- Includes 1-800-LIEBERT Customer Response Center.
- Includes access to Liebert Customer Services Network On-Line Internet portal.
- Subject to all Terms & Conditions as noted in the Liebert Maintenance Agreement.

**SERVICE PERFORMED**

**Full Preventive Maintenance Service**

1. Perform a complete visual inspection of the internal sub-assemblies, wiring harnesses, contactors, cables, major components, and check for proper clearance around the unit.
2. Inspect all transformer, terminal block, and ground/neutral bus bar connections for tightness.
3. Inspect input and output breaker(s) for tightness.
4. Inspect high and low voltage junction box terminals for tightness.
5. Inspect all option wiring for tightness. (Spike suppressor, ground fault, phase rotation/loss).
6. Inspect all capacitor bank connections for tightness.
7. Verify that all cooling fans are functional and air ducts are open.
8. Verify continuity of all fuses and that they are correctly rated.
9. Measure input and output phase to phase voltage.
10. Measure the output, neutral, and ground current.
11. Verify KVA load and capacity per phase.
12. Verify grounding electrode conductor and any isolated grounds.
13. Measure filter capacitor currents at no load for all three phases (if applicable).
14. Measure primary, secondary, 2nd harmonic, and 3rd harmonic (if applicable). All should be balanced within 2.5% deviation.
15. Verify EPO lamps are illuminated.
16. Check that the local and remote EPO's are functioning properly (if permitted).
17. Verify that the monitor is recording within +/- 2% of those values measured.
18. Activate the transformer over-temp alarm and shutdown circuits to confirm proper operation (if permitted).
19. Verify the operation of any option for alarm or shutdown sequence (if permitted).
20. Verify the operation of any customer alarm circuit(s) and specified messages.
21. Verify specified restart capabilities (manual or auto-restart).
22. Verify the operation of the bypass switch and the bypass transformer over temp alarm (if applicable).

**NOTE: Preventive Maintenance usually requires a shut-down to ensure electrical connection integrity.**