

DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
8 units	CALIBRATION OF ANALYTICAL BALANCE	PhP 12,800.00

TERMS OF REFERENCE


I. TECHNICAL SPECIFICATIONS:

1. Balance capacity
 - Adam 250g
 - Denver 250g
 - Shimadzu Aux 220g
 - Acculab 210g
 - Precisa 200g
 - Mettler 200g
 - Sartorius 200g
 - Sartorius 124g
2. Repeatability of reading
3. Departure from nominal value
4. Off-center loading
 - Limit of performance


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
11. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
12. The successful bidder shall provide the following additional requirements:
 - Philgeps registration
 - Updated Mayor's Permit
 - Omnibus Sworn Statement

Recommended by:


V. S. Llamo
Chief SRS, GRFTLD

Approved by:


A. M. de Guzman, CESO IV
Director, ERTLS

DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
3 units	CALIBRATION OF TOP LOADING BALANCE	PhP 4,800.00

TERMS OF REFERENCE


I. TECHNICAL SPECIFICATIONS:

1. Balance capacity
 - Adam – 75 kg
 - Kern - 30 kg
 - CHYO - 30 kg
2. Repeatability of reading
3. Departure from nominal value
4. Off-center loading
 - Limit of performance


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
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9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
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DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
1 unit	CALIBRATION OF OIL BATH	PhP 2,600.00

TERMS OF REFERENCE



I. TECHNICAL SPECIFICATIONS:

1. Calibration at 100°C
2. Calibration must be performed at actual operating conditions
3. Elapsed time for temperature rise from different set points must be determined

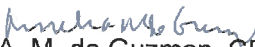
II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
11. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
12. The successful bidder shall provide the following additional requirements:
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 - Omnibus Sworn Statement

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DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
3 units	CALIBRATION OF WATER BATH (1 SET POINT)	PhP 4,800.00

TERMS OF REFERENCE



I. TECHNICAL SPECIFICATIONS:

1. Calibration at 80 °C
2. Calibration must be performed at actual operating conditions
3. Elapsed time for temperature rise from different set points must be determined


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
11. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
12. The successful bidder shall provide the following additional requirements:
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Quantity	Article	Approved Budget for the Contract
3 units	CALIBRATION OF WATER BATH (3 SET POINTS)	PhP 7,800.00

TERMS OF REFERENCE


I. TECHNICAL SPECIFICATIONS:

1. Calibration at the following set points:
 - 3 units at 40°C, 50°C and 60°C
2. Calibration must be performed at actual operating conditions
3. Elapsed time for temperature rise from different set points must be determined


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
11. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
12. The successful bidder shall provide the following additional requirements:
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Quantity	Article	Approved Budget for the Contract
2 units	CALIBRATION OF CALORIMETER	PhP 18,000.00

TERMS OF REFERENCE

I. TECHNICAL SPECIFICATIONS:


1. Calibration at 25°C
2. Calibration must be performed at actual operating conditions
3. Elapsed time for temperature rise from different set points must be determined

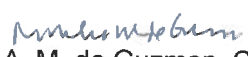
II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
11. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
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Quantity	Article	Approved Budget for the Contract
1 unit	CALIBRATION OF CENTRIFUGE	PhP 3,600.00

TERMS OF REFERENCE

I. TECHNICAL SPECIFICATIONS:

1. Calibration of revolutions per minute (rpm)
2. Calibration must be performed at actual operating conditions
3. Elapsed time for temperature rise from different set points must be determined


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB). If no available accredited facility, calibration provider must be capable to conduct calibration of the required parameters with uncertainty of measurement.
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
11. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
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Quantity	Article	Approved Budget for the Contract
1 unit	CALIBRATION OF CHNS ANALYZER	PhP 29,000.00

TERMS OF REFERENCE

I. TECHNICAL SPECIFICATIONS:

1. Calibration at the following settings:
 - CHN 850°C, 950°C
 - S 1,350°C (If no available probe: At highest temperature probe available in the industry is accepted)
2. Calibration must be performed at actual operating conditions
3. Elapsed time for temperature rise from different set points must be determined

II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
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Quantity	Article	Approved Budget for the Contract
2 units	CALIBRATION OF CONDUCTIVITY METER	Php 5,800.00

TERMS OF REFERENCE



I. TECHNICAL SPECIFICATIONS:

1. Calibration of:
 - Conductivity probe
 - Conductivity sensor
2. Calibration at actual operating conditions

II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
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DEPARTMENT OF ENERGY
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Quantity	Article	Approved Budget for the Contract
5 units	CALIBRATION OF DRYING OVEN 1 SET POINT	Php 8,000.00

TERMS OF REFERENCE

I. TECHNICAL SPECIFICATIONS:

1. Calibration at the following set points:
 - Coal Air-Drying Oven 40°C
 - Jouan Mechanical Oven 110°C
 - Minimum Free-Space Oven 110°C
 - Memmert Oven 110°C
 - Labtech Oven 105°C
2. Calibration must be performed at actual operating conditions
3. Elapsed time for temperature rise from different set points must be determined


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
11. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
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Recommended by:


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Director, ERTLS

DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
2 units	CALIBRATION OF DRYING OVEN 3 SET POINTS	Php 5,200.00

TERMS OF REFERENCE

I. TECHNICAL SPECIFICATIONS:

1. Calibration at the following set points:
 - 100°C
 - 125°C
 - 150°C
2. Calibration must be performed at actual operating conditions
3. Elapsed time for temperature rise from different set points must be determined

II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
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Quantity	Article	Approved Budget for the Contract
4 units	CALIBRATION OF CARBOLITE AND PRUFER FURNACE	PhP 53,400.00

TERMS OF REFERENCE



I. TECHNICAL SPECIFICATIONS:

1. Calibration at five (5) set points (500°C, 750°C, 815°C, 900°C, 950°C)
2. Elapsed time for temperature rise from different set points must be determined


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
11. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
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DEPARTMENT OF ENERGY
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Quantity	Article	Approved Budget for the Contract
2 units	CALIBRATION OF NABERTHERM FURNACE	PhP 21,500.00

TERMS OF REFERENCE



I. TECHNICAL SPECIFICATIONS:

1. Calibration at three (3) set points (650°C, 815°C, 950°C)
2. Elapsed time for temperature rise from different set points must be determined


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
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DEPARTMENT OF ENERGY
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Quantity	Article	Approved Budget for the Contract
2 units	CALIBRATION OF THERMOLYNE AND DAIHAN FURNACE	Php 7,200.00

TERMS OF REFERENCE



I. TECHNICAL SPECIFICATIONS:

1. Calibration at two (2) set points (525°C, 750°C)
2. Elapsed time for temperature rise from different set points must be determined


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
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DEPARTMENT OF ENERGY
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Quantity	Article	Approved Budget for the Contract
12 pcs	CALIBRATION OF HYDROMETER	PhP 22,800.00

TERMS OF REFERENCE



I. TECHNICAL SPECIFICATIONS:

1. Calibration for:
 - CH-02 and CH-09 (0.7000, 0.7250, 0.7500)
 - CH-03 and CH-12 (0.8000, 0.8250, 0.8500)
 - CH-04 and CH-13 (0.8500, 0.8750, 0.9000)
 - CH-05 and CH-14 (0.9000, 0.9250, 0.9500)
 - CH-07, CH-10 and CH-11 (0.7500, 0.7750, 0.8000)
 - CH-08 (0.9500, 0.9750, 1.0000)
2. Calibration must be performed at actual ambient conditions

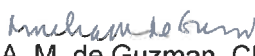
II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB). If no available accredited facility, calibration provider must be capable to conduct calibration of the required parameters with uncertainty of measurement.
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Uncertainty of measurement must be at least at 95 percent confidence level.
4. Calibration standards traceable to certified reference materials must be used.
5. Service/calibration report must be provided after performing calibration.
6. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
7. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
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Quantity	Article	Approved Budget for the Contract
3 units	CALIBRATION OF pH METER	PhP 8,700.00

TERMS OF REFERENCE


I. TECHNICAL SPECIFICATIONS:

1. Calibration of:
 - Probe
 - Sensor
2. Calibration at actual operating conditions


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
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Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
9 pcs	CALIBRATION OF STANDARD MASS	Php 5,850.00

TERMS OF REFERENCE

I. TECHNICAL SPECIFICATIONS:


1. Calibration of:

- Troemner (1 g, 5 g, 10 g, 2-pc 20 g, 50 g, 100 g)
- Stainless (1 g, 200 g)

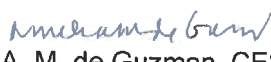
II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Uncertainty of measurement must be at least at 95 percent confidence level.
4. Calibration standards traceable to certified reference materials must be used.
5. Service/calibration report must be provided after performing calibration.
6. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
7. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
8. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
9. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
10. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
11. The successful bidder shall provide the following additional requirements:
 - Philgeps registration
 - Updated Mayor's Permit
 - Omnibus Sworn Statement

Recommended by:


V. S. Llamo
Chief SRS, GRFTLD 

Approved by:


A. M. de Guzman, CESO IV
Director, ERTLS

DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
3 units	CALIBRATION OF TEMPERATURE SENSOR	PhP 6,000.00

TERMS OF REFERENCE

I. TECHNICAL SPECIFICATIONS:

1. Calibration at 50°C and 110°C
2. Calibration must be performed at actual operating conditions
3. Elapsed time for temperature rise from different set points must be determined

II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
11. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
12. The successful bidder shall provide the following additional requirements:
 - Philgeps registration
 - Updated Mayor's Permit
 - Omnibus Sworn Statement

Recommended by:


V. S. Llamo
Chief SRS, GRFTLD

Approved by:


A. M. de Guzman, CESO IV
Director, ERTLS

DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
1 unit	CALIBRATION OF TEST RESISTOR	PhP 2,300.00

TERMS OF REFERENCE



I. TECHNICAL SPECIFICATIONS:

1. Calibration at conductivity of 10kOhm
2. Calibration must be performed at actual operating conditions


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
11. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
12. The successful bidder shall provide the following additional requirements:
 - Philgeps registration
 - Updated Mayor's Permit
 - Omnibus Sworn Statement

Recommended by:


V. S. Llamo
Chief SRS, GRFTLD 

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Director, ERTLS

DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
11 units	CALIBRATION OF THERMOHYGROMETER	PhP 16,500.00

TERMS OF REFERENCE



I. TECHNICAL SPECIFICATIONS:

1. Calibration of:
 - Temperature
 - Relative humidity
2. Calibration at actual operating conditions


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
11. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
12. The successful bidder shall provide the following additional requirements:
 - Philgeps registration
 - Updated Mayor's Permit
 - Omnibus Sworn Statement

Recommended by:


V. S. Llamo
Chief SRS, GRFTLD 

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A. M. de Guzman, CESO IV
Director, ERTLS

DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
4 pcs	CALIBRATION OF DIGITAL THERMOMETER	PhP 11,120.00

TERMS OF REFERENCE



I. TECHNICAL SPECIFICATIONS:

1. Calibration at 5 set points (20, 40, 50, 60, 80 °C)
2. Calibration must be performed at actual ambient conditions


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
11. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
12. The successful bidder shall provide the following additional requirements:
 - Philgeps registration
 - Updated Mayor's Permit
 - Omnibus Sworn Statement

Recommended by:


V. S. Llamo
Chief SRS, GRFTLD 

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Director, ERTLS

DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
2 pc	CALIBRATION OF LIQUID-IN-GLASS THERMOMETER WITH -20 °C	PhP 5,560.00

TERMS OF REFERENCE



I. TECHNICAL SPECIFICATIONS:

1. Calibration of mercury-filled glass thermometer at 5 set points:
 - Alcohol-filled CT-02 ASTM 6C / IP 2C (-20, -10, -5, 0, 10 °C) partial immersion at 76mm
 - Mercury-filled CT-03 ASTM 5C / IP 1C (-20, -10, -5, 0, 10 °C) partial immersion at 108mm
2. Calibration must be performed at actual ambient conditions


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
11. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
12. The successful bidder shall provide the following additional requirements:
 - Philgeps registration
 - Updated Mayor's Permit
 - Omnibus Sworn Statement

Recommended by:


V. S. Llamo
Chief SRS, GRFTLD 

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Director, ERTLS

DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
8 pcs	CALIBRATION OF MERCURY-FILLED GLASS THERMOMETER (4 SET POINTS)	PhP 10,400.00

TERMS OF REFERENCE

I. TECHNICAL SPECIFICATIONS:

1. Calibration of mercury-filled glass thermometers at 4 set points:



Thermometer ID	Thermometer Type	Set Point	Length, mm	Immersion, mm
CT-01	ASTM 121C-8b	0, 99, 100, 101 °C	300 to 310 mm	Total immersion
CT-16	ASTM 11C / IP 28C	0, 99, 100, 101 °C	305 to 315 mm	25 mm immersion
CT-09	ASTM 120C-86	0, 39, 40, 41 °C	300 to 310 mm	Total immersion
CT-11	ASTM 120C-86	0, 39, 40, 41 °C	300 to 310 mm	Total immersion
CT-12	ASTM 120C-86	0, 39, 40, 41 °C	300 to 310 mm	Total immersion
CT-14	ASTM 46C-86	0, 49, 50, 51 °C	300 to 310 mm	Total immersion
CT-17	ASTM 16C	50, 100, 125, 150 °C	390 to 400 mm	Total immersion
CT-18	ASTM 34C / IP 21C	40, 50, 60, 100 °C	415 to 425 mm	50 mm immersion

2. Calibration must be performed at actual ambient conditions


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Uncertainty of measurement must be at least at 95 percent confidence level.
4. Calibration standards traceable to certified reference materials must be used.
5. Service/calibration report must be provided after performing calibration.
6. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
7. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
8. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
9. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
10. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
11. The successful bidder shall provide the following additional requirements:
 - Philgeps registration
 - Updated Mayor's Permit
 - Omnibus Sworn Statement

Recommended by:


V. S. Llamo
Chief SRS, GRFTLD 

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A. M. de Guzman, CESO IV
Director, ERTLS

DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
5 pcs	CALIBRATION OF MERCURY-FILLED GLASS THERMOMETER (5 SET POINTS)	Php 6,500.00

TERMS OF REFERENCE

I. TECHNICAL SPECIFICATIONS:

1. Calibration of mercury-filled glass thermometers at 5 set points:



Thermometer ID	Thermometer Type	Set Point	Length, mm	Immersion, mm
CT-06	ASTM 12C	0, 25, 50, 60, 100 °C	415 to 425 mm	Total immersion
CT-07	ASTM 12F	32, 85, 122, 140, 212 °F	415 to 425 mm	Total immersion
CT-08	ASTM 9C / IP 15C	0, 35, 50, 70, 100 °C	285 to 295 mm	57 mm immersion
CT-10	ASTM 9C	0, 35, 50, 70, 100 °C	285 to 295 mm	57 mm immersion
CT-19	ASTM 12C	0, 35, 50, 70, 100 °C	415 to 425 mm	Total immersion

2. Calibration must be performed at actual ambient conditions

II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Uncertainty of measurement must be at least at 95 percent confidence level.
4. Calibration standards traceable to certified reference materials must be used.
5. Service/calibration report must be provided after performing calibration.
6. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed.
7. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service.
8. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance.
9. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
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 - Omnibus Sworn Statement

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Director, ERTLS

DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
1 unit	CALIBRATION OF TIMER/STOP WATCH 1 CHANNEL	Php 2,600.00

TERMS OF REFERENCE



I. TECHNICAL SPECIFICATIONS:

1. Calibration at the following set points:
 - 5', 7', 10', 20', 30', 60'


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
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 - Omnibus Sworn Statement

Recommended by:


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Director, ERTLS

DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
4 units	CALIBRATION OF TIMER/STOP WATCH 3 Channels	Php 14,400.00

TERMS OF REFERENCE



I. TECHNICAL SPECIFICATIONS:

1. Calibration of 3 channels at the following set points:
 - 5', 7', 10', 20', 30', 60'


II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025 accredited by Philippine Accreditation Bureau (PAB).
2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration.
3. Calibration must be conducted on-site.
4. Uncertainty of measurement must be at least at 95 percent confidence level.
5. Calibration standards traceable to certified reference materials must be used.
6. Service/calibration report must be provided after performing calibration.
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10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order.
11. The successful bidder shall conform to the service needed based on the TOR indicated herewith.
12. The successful bidder shall provide the following additional requirements:
 - Philgeps registration
 - Updated Mayor's Permit
 - Omnibus Sworn Statement

Recommended by:


V. S. Llamo
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Director, ERTLS

DEPARTMENT OF ENERGY
Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

Quantity	Article	Approved Budget for the Contract
2 units	CALIBRATION OF TIMER/STOP WATCH 5 Channels	Php 9,200.00

TERMS OF REFERENCE



I. TECHNICAL SPECIFICATIONS:

1. Calibration of 5 channels at the following set points:
 - 3', 5', 6', 7', 8', 10'

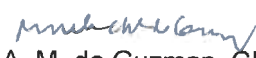
II. TERMS AND CONDITIONS:

1. Calibration facility must be ISO 17025 accredited by Philippine Accreditation Bureau (PAB).
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 - Updated Mayor's Permit
 - Omnibus Sworn Statement

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