

# **THE BUREAU OF ENERGY EFFICIENCY (MANNER AND INTERVALS OF TIME FOR CONDUCT OF ENERGY AUDIT) REGULATIONS, 2010**

[Noti. No. 02/11(6)/05-BEE, dt. 28-4-2010]

Whereas certain draft regulations namely, the Bureau of Energy Efficiency (the Manner and Intervals of Time for Conduct of Energy Audit) Regulations, 2009, were published vide Bureau of Energy Efficiency Notification Number 02/11(6)/05, dated the 22nd December, 2009 in the Gazette of India, Extraordinary, Part III, Section 4, dated the 26th December, 2009 as required under sub-section (1) of section 58 of the Energy Conservation Act, 2001 (52 of 2001) inviting objections and suggestions from all persons likely to be affected thereby within forty-five days from the date of publication of the said notification in the Gazette; And Whereas the said draft regulations were published in the Official Gazette on the 26th December, 2009;

And Whereas no objection or suggestion has been received in respect of the said draft regulations within the specified period;

Now, Therefore, in exercise of the powers conferred by clause (g) of sub-section (2) of section 58, read with clause (q) of sub-section (2) of section 13 of the said Act, the Bureau of Energy Efficiency with the previous approval of the Central Government, hereby makes the following regulations, namely:—

## **1. Short title and commencement**

(1) These regulations may be called the Bureau of Energy Efficiency (Manner and Intervals of Time for Conduct of Energy Audit) Regulations, 2010.

(2) They shall come into force on the date of their publication in the Official Gazette.

## **2. Definitions**

(1) In these regulations, unless the context otherwise requires,—

(a) “Act” means the Energy Conservation Act, 2001;

(b) “energy audit report” means the report of energy audit submitted under regulation 3 and signed by the accredited energy auditor;

(c) “Form” means a form appended to these regulations;

(d) “specific energy consumption” means the average of energy consumed per unit of product or product-mix for the completed financial year.

(2) Words and expressions used herein and not defined but defined in the Act shall have the meanings respectively assigned to them in the Act.

## **3. Intervals of time for conduct of energy audit**

(1) Every designated consumer shall have its first energy audit conducted, by an accredited energy auditor within 18 months of the notification issued by the Central Government under clause (i) of section 14 of the Act.

(2) The interval of time for conduct and completion of subsequent energy audits shall be three years with effect from the date of submission of the previous energy audit report by the accredited energy auditor to the management of the designated consumer.

## **4. Manner of energy audit**

Every energy audit under the Act shall be conducted in the following manner:—

(1) *Verification of data of energy use*

The accredited energy auditor shall—

(a) verify the information submitted to the designated agency under the Energy Conservation (the Form and Manner for Submission of Report on the Status of Energy Consumption by the Designated Consumers) Rules, 2007 for the previous two years through examination of energy bills, production data, inspection of

energy-using equipment, production-processes, and systems, spot measurements, discussion or interview with the officers and staff regarding operation of plants, energy management procedures, equipment maintenance problems, equipment reliability, projected equipment needs, improvements undertaken or planned, establish validated data on annual energy consumption and prepare a report in Form 1 for the year preceding to the year for which energy audit report shall be prepared and submitted;

- (b) establish specific energy consumption for the year referred to in clause (a);
  - (c) disaggregate the energy consumption data and identify major energy using equipment, processes and systems.
- (2) *Scope of energy audit*

The accredited energy auditor jointly with the energy manager of the designated consumer shall—

- (a) develop a scope of work for the conduct of energy audit required under the Act with a view to ensuring adequate coverage in terms of the share of total energy use that is covered in the energy audit;
  - (b) select energy intensive equipment or processes for energy auditing;
  - (c) agree on best practice procedures on measuring the energy efficiency performance of selected equipment and on algorithm to estimate energy performance and energy savings;
  - (d) collect energy consumption, and production data for the equipment and processes covered within the scope of energy audit, operating data, and schedule of operation, non-proprietary process flow charts, production level disaggregated by product, if applicable, and such other historical data as may be considered essential by the accredited energy auditor for achieving the purpose of energy audit.
- (3) *Monitoring and analysis of use of energy data for energy audit*

The accredited energy auditor shall—

- (a) verify the accuracy of the data collected in consultation with the energy manager, appointed or designated by the designated consumer in terms of the Notification Number SO 318(E), dated the 2nd March, 2007, as per standard practice to assess the validity of the data collected;
- (b) analyse and process the data with respect to—
  - (i) consistency of designated consumers' data monitoring compared to the collected data;
  - (ii) recommendations to reduce energy consumption and improve energy efficiency;
  - (iii) summary overview of energy consumption in plant or establishment by fuel type and by section;
- (c) conduct equipment energy performance measurements with due diligence and caution.
- (4) *reparation of recommendations on energy saving measures, their cost benefit*

*analysis*

The accredited energy auditor having regard to the overall efficiency of the production process, techno-economic viability of energy saving measures, site conditions and capacity of the designated consumer to invest for their implementation, shall prepare a list of recommendations to save energy and the list shall include—

- (a) a brief description of each recommended measure;
- (b) the estimated energy saving as well as energy cost reduction potential over a reasonable technical or economic life of the measure;
- (c) any known or expected technical risk associated with each measure;

- (d) a preliminary assessment of financial attractiveness of each measure or assessment of maximum investment feasible based on the estimated energy cost saving potential over the life of the measure;
- (e) tabulated summary of recommendations listed as per their implementation schedule (short, medium and long-term);
- (f) where different alternatives for implementation of an energy efficiency measure are available, the accredited energy auditor shall examine and discuss such options and recommend the techno-financially better option;
- (g) where the installation or implementation of any recommended energy saving measure affects procedures for operation and maintenance, staff deployment and the budget, the recommendation shall include discussion of such impacts including their solutions.

## **5. Prioritisation and preparation of action plan**

(1) The accredited energy auditor jointly with the energy manager shall select from the energy audit report such recommended measures as are included in sub-regulation (4) of regulation 4 which in the opinion of the designated consumer are technically viable, financially attractive and within its financial means, prioritise

them and prepare plan of action for their implementation and this action plan shall include—

- (a) preparation of detailed techno-economic analysis of selected measures;
- (b) a monitoring and verification protocol to quantify of annual basis the impact of each measure with respect to energy conservation and cost reduction for reporting to Bureau and the concerned State designated agency;
- (c) a time schedule agreed upon by the designated consumer of selected measures taking into consideration constraints such as availability of finance and availability of proposed equipment.

(2) The accredited energy auditor based on the activities undertaken under sub-regulation (4) of regulation 4 and regulation 5 shall submit a report in Form 2 to the management of the designated consumer.

(3) The accredited energy auditor shall evaluate the implementation of each recommended energy saving measure in the previous audit report and submit a report in Form 3 to the management of the designated consumer.

## **6. Structure of the energy audit report**

(1) The energy audit report structure shall be jointly decided by the accredited energy auditor and designated consumer.

(2) The energy audit report shall highlight, details of specific energy consumption, list of recommendations to reduce energy consumption and costs, monitoring and evaluation of impact of selected measures and conclude with certification by accredited energy auditor stating that—

- (a) the data collection has been carried out diligently and truthfully;
- (b) all data monitoring devices are in good working condition and have been calibrated or certified by approved or authorised agencies and no tampering of such devices have occurred;
- (c) all reasonable professional skill, care and diligence have been taken in preparing the energy audit report and the contents thereof are a true representation of the facts;
- (d) adequate training provided to personnel involved in daily operations after implementation of recommendations; and
- (e) the energy audit has been carried out in accordance with these regulations, and the format for the preparation of energy audit report is given in Form 4 for guidance.

(3) The accredited energy auditor shall highlight the strengths and weaknesses of the designated consumer in the management of energy and energy resources in the energy audit report

and recommend necessary action to improve upon method of reporting data, energy management system in detail along with their underlying rationale, and improving energy efficiency and reducing energy consumption in the designated consumer.

(4) The accredited energy auditor shall sign the energy audit report under the seal of its firm giving all the accreditation details along with details of manpower employed in conducting the energy audit.

(5) The energy audit report shall include a work schedule sheet duly signed by accredited energy auditor and energy manager of the designated consumer.

### FORM 1

#### DETAILS OF VALIDATED DATA ON ENERGY CONSUMED AND SPECIFIC ENERGY CONSUMPTION PER UNIT OF PRODUCTION

*[Refer Regulation 4(1)(a) and (b)]*

1.	Name of the Unit	
2.	The sector in which unit falls (Refer Annexure-1)	
3.	(a) Complete address of Unit's location (including Chief Executive's name and designation) with mobile	
	(b) Year of establishment	
4.	Registered office address with telephone, fax numbers and e-mail,	
5.	Name, designation, address, mobile, telephone, fax numbers, and e-mail of energy manager	

6.	Production and capacity utilisation details						
	Year	Main products	Units (Please specify)	Installed capacity (a)	Actual production (b)	% Capacity utilisation (b/a) x 100	Specific energy consumption
		Product 1 Product 2 Other products					
	20...20...						

7.	Energy consumption and cost,		
7.1	Electricity consumption and cost		
	(A) Purchased electricity		
	(i) Units (Millions kWh/year)		
	(ii) Total cost (Rs. Millions/year)		

	<ul style="list-style-type: none"> <li>(iii) Plant connected load (kW)</li> <li>(iv) Contract demand (kVA) with utility</li> <li>(v) Connected load (kW)</li> </ul>	
	<p>(B) Own generation</p> <ul style="list-style-type: none"> <li>(a) Through diesel generating sets <ul style="list-style-type: none"> <li>(i) Annual generation (Millions kWh/year)</li> <li>(ii) Total cost (Rs. Million/year)</li> <li>(iii) Fuel used (HSD/LDO/LSHS/LSFO (Refer Annexure-2),</li> <li>(iv) Gross calorific value (kCal/kg)</li> <li>(v) Annual fuel consumption (tonne)</li> <li>(vi) Total annual fuel cost (Rs. Million)</li> </ul> </li> <li>(b) Through steam turbine/generator <ul style="list-style-type: none"> <li>(i) Annual generation (Millions kWh/year)</li> <li>(ii) Fuel used, state which type of fuel was used (C=coal, B=biomass, E=electricity). If coal was used,, state which grade i.e.,C/I=imported or C/F=Coal of grade F,</li> </ul> </li> <li>(c) Through gas turbine <ul style="list-style-type: none"> <li>(i) Annual generation (Millions kWh/year)</li> <li>(ii) Fuel used (state which type of fuel was used Natural Gas (NG), Piped Natural Gas (PNG), Compressed Natural Gas (CNG), Naphtha)</li> <li>(iii) Gross calorific value (kCal/SCM)</li> <li>(iv) Annual fuel consumption (SCM)</li> <li>(v) Total annual fuel cost (Rs. Million)</li> </ul> </li> </ul>	
(C)	Total generation of electricity (Millions kWh/year) 7.1(B) [a(i)+b(i)+c(i)]	
(D)	Electricity supplied to the grid/others (specify Millions kWh/year)	
(E)	Total Electricity consumed (Millions kWh/year) 7.1 [A(i)+C-D]	
7.2	Fuel consumption and % cost for process heating	
	<p>(A) Coal</p> <ul style="list-style-type: none"> <li>(i) Gross calorific value (kCal/kg)</li> <li>(ii) Quantity purchased (tonne/year)</li> <li>(iii) Quantity used for power generation (tonne/year)</li> <li>(iv) Quantity used as raw material,, if any (tonne/year)</li> <li>(v) Quantity used for process heating (tonne/year)</li> <li>(vi) Total coal cost for process (Rs. Million/year)</li> </ul>	
	<p>(B) Lignite</p> <ul style="list-style-type: none"> <li>(i) Gross calorific value (kCal/kg)</li> <li>(ii) Quantity purchased (tonne/year)</li> <li>(iii) Quantity used for power generation (tonne/year)</li> <li>(iv) Quantity used as raw material,, if any (tonne/year)</li> <li>(v) Quantity used for process heating (tonne/year)</li> <li>(vi) Total lignite cost for process (Rs. Million/year)</li> </ul>	
	(C) Bio mass Other purchased solid fuels (please specify) bagasse, rice husk, etc.	

	<ul style="list-style-type: none"> <li>(i) Average moisture content as fired (%)</li> <li>(ii) Average gross calorific value as fired (kCal/kg)</li> <li>(iii) Quantity purchased (tonne/year)</li> <li>(iv) Quantity used as raw material, if any (tonne/year)</li> <li>(v) Quantity used for process heating (tonne/year)</li> <li>(vi) Total bagasse cost for process (Rs. Million/year)</li> </ul>	
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7.3	Liquid	
	<p>(A) Furnace Oil (F.O.)</p> <ul style="list-style-type: none"> <li>(i) Gross calorific value (kCal/kg)</li> <li>(ii) Quantity purchased (kL/year)</li> <li>(iii) Quantity used for power generation (kL/year)</li> <li>(iv) Quantity used as raw material,, if any (kL/year)</li> <li>(v) Quantity used for process heating (kL/year)</li> <li>(vi) Total F.O. cost for process heating (Rs. Million/year)</li> </ul>	
	<p>(B) Low Sulphur Heavy Stock (LSHS)</p> <ul style="list-style-type: none"> <li>(i) Gross calorific value (kCal/kg)</li> <li>(ii) Quantity purchased (tonne/year)</li> <li>(iii) Quantity used for power generation (tonne/year)</li> <li>(iv) Quantity used as raw material,, if any (tonne/year)</li> <li>(v) Quantity used for process heating (tonne/year)</li> <li>(vi) Total LSHS cost for process heating (Rs. Million/year)</li> </ul>	
	<p>(C) High Sulphur Heavy Stock (HSHS)</p> <ul style="list-style-type: none"> <li>(i) Gross calorific value (kCal/kg)</li> <li>(ii) Quantity purchased (tonne/year)</li> <li>(iii) Quantity used for power generation (tonne/year)</li> <li>(iv) Quantity used as raw material,, if any (tonne/year)</li> <li>(v) Quantity used for process heating (tonne/year)</li> <li>(vi) Total HSHS cost for process heating (Rs. Million/year)</li> </ul>	
	<p>(D) Diesel Oil</p> <p>(a) High Speed Diesel (HSD)</p> <ul style="list-style-type: none"> <li>(i) Gross calorific value (kCal/kg)</li> <li>(ii) Quantity purchased (kL/year)</li> <li>(iii) Quantity used for power generation (tonne/year)</li> <li>(iv) Quantity used as raw material, if any (kL/year)</li> <li>(v) Quantity used for process heating (kL/year)</li> <li>(vi) Total HSD cost for process heating (Rs. Million/year)</li> </ul> <p>(b) Light Diesel Oil (LDO)</p> <ul style="list-style-type: none"> <li>(i) Gross calorific value (kCal/kg)</li> <li>(ii) Quantity purchased (kL/year)</li> <li>(iii) Quantity used for power generation (kL/year)</li> <li>(iv) Quantity used as raw material, if any (kL/year)</li> </ul>	

	(v) Quantity used for process heating (kL/year) (vi) Total LDO cost for process heating (Rs. Million/year)	
7.4	Gas	
	(A) Compressed Natural Gas (CNG) (i) Gross calorific value (kCal/SCM) (Refer Annexure-2) (ii) Quantity purchased (million SCM/year) (iii) Quantity used for power generation (million SCM/year) (iv) Quantity used as raw material, if any (million SCM/year) (v) Quantity used for process heating (million SCM/year) (vi) Total cost of natural gas for process heating (Rs. Million/year)	
	(B) Liquefied Petroleum Gas (LPG) (i) Gross calorific value (kCal/SCM) (ii) Quantity purchased (million SCM/year) (iii) Quantity used for power generation (million SCM/year) (iv) Quantity used as raw material, if any (million SCM/year) (v) Quantity used for process heating (million SCM/year) (vi) Total cost of LPG for process heating (Rs. Million/year)	
	(C) Gas generated as by-product/waste in the plant and used as fuel (i) Name (ii) Gross calorific value (kCal/SCM) (iii) Quantity used for process heating (million SCM/year) (iv) Total cost of by-product gas for process heating (Rs. Million/year)	
7.5	Solid waste	
	Solid waste generated in the plant and used as fuel (i) Name (ii) Gross calorific value (kCal/kg) (iii) Quantity used for process heating (tonne/year) (iv) Total cost of solid waste for process heating (Rs. Million/year)	
7.6	Liquid waste	
	(A) Liquid effluent/waste generated in the plant and used as fuel (i) Name (ii) Gross calorific value (kCal/kg) (iii) Quantity used for process heating (tonne/year) (iv) Total cost of liquid effluent for process heating (Rs. Million/year)	
7.7	Others	

	(i) Name	
	(ii) Average gross calorific value (kCal/kg)	
	(iii) Quantity used for power generation (tonnes/year)	
	(iv) Quantity used for process heat (tonnes/year)	
	(v) Annual cost of the others source	

Signature

Signature

Name of the energy manager

Name of the accredited energy auditor

Name of the company

Accreditation deals

Full address

Seal

Seal

### **ANNEXURE-1**

#### **NAME OF SECTORS**

Aluminum, cement, chemicals, chlor-alkali, fertilizers, gas crackers, iron and steel, naphtha crackers, pulp and paper, petrochemicals, petroleum refineries, sugar, textile.

### **ANNEXURE-2**

#### **NOMENCLATURE**

HSD	High Speed Diesel
LDO	Light Diesel Oil
LSHS	Low Sulphur Heavy Stock
LSFO	Low Sulphur Furnace Oil
C	Coal
B	Biomass
E	Electricity
C/I	Coal Imported
C/F	Indian Goal grade F
NG	Natural Gas
PNG	Piped Natural Gas
CNG	Compressed Natural Gas
FO	Furnace Oil
LPG	Liquefied Petroleum Gas
SCM	Standard Cubic Metre (15 <sup>0</sup> C and
KL	Kilo Litre
Million	Ten (10) lakh



**FORM 2**  
**DETAILS OF ENERGY SAVING MEASURES RECOMMENDED IN**  
**THE ENERGY AUDIT REPORT (YEAR)**  
*[Refer Regulation 5(2)]*

S. No.	Energy saving measures (Suggested categories of areas of improvement and modifications for obtaining details of energy saving See Annexure-3)	Investment Million Rs.	Reasons for not implementing the measure	Date of completion of measure/likely completion	Life cycle years	Annual energy savings				
						Oil	Gas	Coal	Electricity	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										

Signature  
Name of the energy manager  
Name of the company  
Full address  
E-mail address  
Telephone/Fax numbers  
Plant address

Signature  
Name of the accredited energy auditor  
Accreditation details  
Seal Contact person

1. Estimate the predicted life of the measure, meaning the number of years the level of first year energy savings or even larger amounts will materialize.
2. Life commercial units of litre, kg., tones, normal cubic metre, kWh or MWh and indicate the unit. Indicate the anticipated potential in energy savings.

**ANNEXURE-3**

**SUGGESTED CATEGORIES OF AREAS OF IMPROVEMENT AND MODIFICATIONS FOR  
OBTAINING DETAILS OF ENERGY SAVINGS**

1. Better house keeping measures
2. Installation of improved process monitoring and control instrumentation, or software
3. Fuel Handling System
4. Steam Generation System
5. Steam Distribution System
6. Electricity Generation System
7. Hot Water System
8. Compressed Air System
9. Raw/Process Water System
10. Cooling Water System
11. Process Cooling/Refrigeration System
12. Heating, Ventilation and Air Conditioning System
13. Electrical System
14. Lighting System
15. Melting/Heating/Drying Equipment (e.g. Furnaces, Heaters, Kilns, Ovens, Dryers, Evaporators, etc.
16. Heat Exchangers
17. Pumps, Compressors, Fans, Blowers, Piping, Ducting
18. Process Equipment (e.g., Reactors, Separation Equipment, Material, Handling Equipment, etc.)
19. Transformers
20. Electric Motors and Drives
21. Process Technology
22. Process Integration
23. Process Control and Automation
24. Other Non-equipment Measures (e.g., Plant Operation/Scheduling, Tariff Schedule, etc.)
25. Recovery of waste heat for process heat or power generation
26. Retrofitting, modification or sizing of fans, blowers, pumps, including duct systems
27. Other

**FORM 3**

*[Refer Regulation 5(3)]*

**DETAILS OF ENERGY CONSERVATION MEASURES IMPLEMENTED, INVESTMENT  
MADE AND SAVINGS IN ENERGY ACHIEVED AND PROGRESS MADE IN THE  
IMPLEMENTATION OF OTHER RECOMMENDATIONS**

**A. Implemented**

Sl. No.	Description of energy	Category	Investment (Rupees)	Verified savings	Verified energy	Units	Fuel	Remarks

	efficiency improvement measure			(Rupees)	savings			
1.								
2.								
3.								

### B. Under implementation

Sl. No.	Description of energy efficiency improvement measure	Category	Investment (Rupees) estimated	Verified savings (Rupees) estimated	Verified energy savings estimated	Units	Fuel	Status of implementation
1.								
2.								
3.								

Signature  
Name of the energy manager  
Name of the company  
Full address  
Contact person  
E-mail address  
Telephone/Fax numbers  
Plant address

Signature  
Name of the accredited energy auditor  
Accreditation details  
Seal

- 
1. Use "C. No." column of form 2 as reference – See Annexure "3" for adoption.
  2. First Year
  3. Use conventional energy, volume or mass units with proper prefix K = 10<sup>3</sup>, M = 10<sup>6</sup>, G=10<sup>9</sup>

### FORM 4

[Refer Regulation 6(2)]

#### GUIDELINES FOR PREPARATION OF ENERGY AUDIT REPORT

Each energy audit report shall include—

- (1) Title page
  - Report title
  - Client name
  - Location of the plant/establishment
  - Date of report
  - Name of the accredited energy auditors
- (2) Table of contents
- (3) Acknowledgement
- (4) Executive summary
  - Company's profile
  - Goals and objectives of the energy management programme
  - Major challenge and goals for the upcoming year
  - Major activities to meet challenges and goal

- Summary and classification of energy
- Conservation measures - should be in Form 2
- 1.0 Introduction about the plant/establishment
  - 1.1 General plant/establishment details and descriptions
  - 1.2 Energy audit team
  - 1.3 Component of production cost (raw materials, energy, chemicals, manpower, overhead, others)
  - 1.4 Major energy use areas
- 2.0 Production process description
  - 2.1 Brief description of manufacturing process
  - 2.2 Process flow diagram and major unit operations
  - 2.3 Major raw material inputs, quantity and costs
- 3.0 Energy and utility system description
  - 3.1 List of utilities
  - 3.2 Brief description of each utility
    - 3.2.1 Electricity
    - 3.2.2 Steam
    - 3.2.3 Water
    - 3.2.4 Compressed air
    - 3.2.5 Chilled water
    - 3.2.6 Cooling water
    - 3.2.7 Others
- 4.0 Detailed process flow diagram and energy and material balance
  - 4.1 Flow chart showing flow rate, temperature, pressures of all input-output streams
  - 4.2 Water balance for entire industry
  - 4.3 Energy balance of the designated consumer in the tabular form
- 5.0 Performance evaluation of major utilities and process equipments/systems
  - 5.1 List of equipments and process where performance testing was done
  - 5.2 Results of performance testing
- 6.0 Energy efficiency in utility and process system
  - 6.1 Specific energy consumption
  - 6.2 Boiler efficiency assessment
  - 6.3 Thermic fluid heater performance assessment
  - 6.4 Furnace efficiency analysis
  - 6.5 Cooling water system performance assessment
  - 6.6 Diesel Generator set performance assessment
  - 6.7 Refrigerator system performance
  - 6.8 Compressed air system performance
  - 6.9 Electric motor load analysis
  - 6.10 Lighting system
  - 6.11 Others
- 7.0 Evaluation of energy management system
  - 7.1 Energy management policy
  - 7.2 Energy management monitoring system
  - 7.3 Bench marking
  - 7.4 Development and establishment of procedures include energy efficiency possibilities
  - 7.5 Training to staff responsible for operational and associated processes
  - 7.6 General audit review
  - 7.7 Conform to Act, rules and regulations framed thereunder
  - 7.8 Strength and weaknesses of the designated consumer

8.0 Energy conservation measures and recommendations

- 8.1 The report shall provide existing energy profile of the designated consumer with percentage share of major equipment/processes, utilities etc., so that it becomes a basic document for future monitoring.
- 8.2 Details of energy saving measures recommended in Form 2.
- 8.3 Cost benefit analysis of each recommended energy saving measures as per standard practice.
- 8.4 The investment proposals shall be backed with technical and economic viability and prioritization of energy conservation measures based on financial analysis of various options taking into account the capacity of the designated consumer to make investment in such measures.
- 8.5 The energy auditor may also consider the substitution of existing energy use by any other form of techno-commercially viable form of energy.
- 8.6 Details of energy saving measures implemented, investment made and saving in energy achieved together with progress made in the implementation of the remaining energy saving measures in Form 3.

9.0 Certification

This part shall indicate certification by accredited energy auditor stating that—

- (i) the data collection has been carried out diligently and truthfully;
- (ii) all data monitoring devices are in good working condition and have been calibrated or certified by approved agencies authorised and no tampering of such devices has occurred;
- (iii) all reasonable professional skill, care and diligence had been taken in preparing the energy audit report and the contents thereof are a true representation of the facts;
- (iv) adequate training provided to personnel involved in daily operations after implementation of recommendations; and
- (v) the energy audit has been carried out in accordance with the Bureau of Energy Efficiency (Manner and Intervals of Time for the Conduct of Energy Audit) Regulations, 2010.

Signature  
Name of the accredited energy auditor  
Accreditation details Seals