### **FORM IV**

### (Refer regulation 7(2)) Bureau of Energy Efficiency REGISTER CONTAINING NAMES OF OFFICES AND FIRMS OF ACCREDITED **ENERGY AUDITORS**

Serial Number AEA - 0118			As on (26/11/2013)	
A.				
1	Name of accredited energy auditor	SURENDRA P.BANKAR		
2	Father's name	PATRUJI K.BANKAR		
3	Date of certification as Energy Manager	Energy Manager – 13.05.2011 Energy Auditor - 01.02.2012		
4	Date of passing the examination in "Energy Performance Assessment for Equipment and Utility Systems"	Passed the Examination Held in Oct 2011		
5	Examination Registration Number of	EA - 12229		
	(i) Energy Manager			
	(ii) "Energy Performance Assessment for Equipment and Utility Systems"			
6	Certificate Registration Number of	6335		
	(i) Energy Manager			
	(ii) "Energy Performance Assessment for Equipment and Utility Systems"			
7	Date of issue of accreditation certificate	26th Nov 2013		
В.	Information in respect	of trade name or firms' na	me	
8	Trade name / firms name under which energy audit is proposed to be conducted	A.R.S. Energy Auditors		
9	Date of accreditation as accredited energy auditor	26 <sup>th</sup> Nov 2013		
10	Type of firm/ private/ Government / NGO etc.	Partnership Firm (Mr. Sach	nin Deshpande)	
11	Name of contact person along with designation, address, telephone, mobile and fax number along with STD codes and email address ( All details compulsory)	Mr. Sachin S. Deshpande, A/1, A/101 Pramodini Pala India Colony, Virar E – 40° 7507184478, sachin.amey	ce CHS, Nr. Air 1305, Mob: +91	
12	Professional postal address with Pin Code of	A/1,A/101 Pramodini Palad	ce CHS, Nr. Air India	

	the accr	edited energy auditor	Colony, Virar E - 401305
13	E-mail a	ddress	Sachin.ameya@gmail.com
14	Telepho (R) (O) Mobile r		Mobile No. +91 7507184478
15		establishment of the trade name / ime for undertaking the energy audit	2006
16	Year of firm	commencement of energy audit of the	2006
17		ce in the system has been obtained	ISO 9001: 2015
18	(List of of all br	ranch offices complete addresses including heads anch offices with telephone, fax and ldresses)	No Branch
	С	Details of Ass	ociated Energy Experts
	19	Number of resource persons available	6
20	with wo	er. of full-time energy auditors in positior ork experience of all energy auditors ted with the firm	
	during	of part-time energy auditors in position the current year / previous yeared with the energy auditor / energy sfirms.	r 1. Mukund Gharpore
21		in which the energy auditor/ energy m has conducted energy audits since n	·
22	Subject	wise expertise	1. Mr. Premanand Sinha ( Iron & Steel) 2. Mr. Ashish Chakrabarty (Textile) 3. Mr. Mahesh Kumar Gupta ( TPP) 4. Mr. Promod Kumar Thapar (TPP) 5. Mr. Ravinder Deshpande (DISCOM) 6. Mr. Sriram Vasant Kothawade

		(DISCOM) 7. Mr. Bhaskar Raval (DISCOM) 8. Mr. Janardhan Kadhe (Building) 9. Mr. Sachin Deshpande (Building) 10. Mr. NareshKumar Sharma (Paper & Pulp)
(a)	Energy audit process system (list sectors) - If no energy audit has been carried out of the process system and parameters, please list nil. Bureau of Energy Efficiency will be calling for detailed information in case agency has listed its energy audit expertise in the process systems	1. TPP 2. Steel & Iron 3. Pharmaceutical 4. Buildings 5. Railway 6. Discom 7. Glasswool 8. Textile .
(b)	Energy audit thermal utility system (list sectors)	1. TPP 2. Steel & Iron 3. Pharmaceutical 4. Buildings
(c)	Energy audit electrical utility system (list sectors)	1. TPP 2. Steel & Iron 3. Pharmaceutical 4. Buildings 5. Railway 6. Discom 7. Textile
23	Instruments available	
	(a) Electrical (list the name of the instruments)	Krykard LM 31-Power Quality Analyzer     Trinity -Globlin 1-Power Analyzer     MECO- Power Tester     Mextech Earth tester
	(b) Thermal (list the name of the instruments)	ACE GAS Analyzer meter     Testo-Thermal Imager     MECO- Infrared Thermometer     VISUAL IR thermometer     Burak metering Thermal Mass Flow Meter for Compressed Air
24	Details of training programme/ seminars/ workshops conducted during the last 3 years in the field of energy efficiency / energy audit	
(i)		One Year Post Graduate Certificate in Energy Management at Ambedkar Institute of Productivity Chennai From Aug 2008 to August 2009

(ii)	Two Weeks Practical Training Programme on Compressed Air System at Regional Energy Efficiency Centre of NPC, Chennai
(iii)	<ul> <li>a) Preparatory training program of Energy Managers &amp; Auditors at L&amp; T, Pawai, Mumbai</li> <li>b) Preparatory training program for Energy Managers &amp; Auditors at Hotel Atithi, Andheri, Mumbai</li> </ul>

D	Remarks( if any)
	Successfully Completed more than <b>20</b> Energy Audit Assignments in Various Industries . The detail experience detail is given in the <i>Energy Audit Assignment</i> <u>Details</u>

I hereby state that information furnished above is true and correct to the best of my knowledge.

Place: Mumbai

Date: 05.12.2021



Signature:

Name: Surendra P. Bankar

Designation:

(Note: Responsibility of the authenticity of the above information rests with the concerned energy auditor/energy auditing agency.)

### **Energy Audit Assignment Details**

- ✓ Sakthi Sugars Ltd. Jyothinagar , Erode (Tamilnadu) (Oct -2008)
  - Thermal Energy Audit Study
  - 10000 TCD capacity plant, having cogeneration power plant of 32 MW
- ✓ Sakthi Sugars Ltd.Sivagangai ,Madurai (Tamilnadu) (Oct -2008)
  - Thermal Energy Audit Study
  - 4000 TCD capacity plant, having cogeneration power plant of 35 MW.

### ✓ Ratnagiri Gas Power Private Ltd. (RGPPPL) Ratnagiri (Maharashtra). – (Oct 2009)

- The study was for water flow measurement of both de-mineralized water and cooling water in the heat exchanger by non contact ultra sonic flow meter for all three blocks of RGPPL having capacity of 1976 MW.
- The study involved the detailed analysis of cooling water system of power plant AND measurement of flow of both D.M water & CCW across PHEs and other gas turbine & steam turbine heat exchanger and analyzing its impact on power plant output.

#### ✓ Bureau of Energy Efficiency (BEE), Delhi. ( 2008-09)

- BEE is Central Govt. Organisation under Ministry of Power engaged in formulation & implementation of energy saving policies and measures in India.
- The study was conducted to find out the energy consumption & saving potential in four sectors in India Agriculture Pumping, Commercial Building and Municipalities.

#### ✓ Gujrat State Energy Generation Limited, Hazira (Gujrat). (2010)

 156.1 MW gas based combined cycle power plant having two gas turbines and one steam turbine.

- The study involved was detailed analysis of power plant performance at various loads and complete energy audit of plant main equipments & its auxiliaries.
- To suggest recommendations to conserve energy and its monetary impact.
- All auxiliaries such as Electrical Systems, Pumping Systems, Cooling Water Systems, HVAC Systems, Compressed Air Systems, Lighting Systems and Insulation Systems were covered.

### ✓ Energy Audit of Indian Sailor's Home Society, Mumbai (ISHS) - (2010)

- ISHS is registered as a public company under Union Ministry of Shipping, Govt. of India, which allows the seamen to stay in Mumbai during their transit period.
- ISHS has two buildings of two floors each having 97 rooms and 10 dormitories.
- The study involved was complete analysis Energy consumption pattern, power measurement of FTL, fans, air conditions, T.V etc. and suggestions of corrective measures with cost benefit analysis.

## ✓ Heat Rate Assessment of Bio Mass Power Plants in Maharashtra.(2009-10)

- The study was done for Maharashtra State Energy Development Agency (MEDA) for fixing the tariff rate for bio-mass power in Maharashtra State.
- The study was done in 8 bio mass power plant in Maharashtra using different bio mass fuels.
- Power plant performance was monitored at different loads and analysed & heat rate was assessed.
- The units covered are
  - Shalivahana Green Energy Ltd. Wani, Yavatmal,
  - Saradambika Power Plant Pvt. Ltd. Chimur, Chandrapur
  - Waram Bio-Energy , Bhandara
  - Gayatri Agro Energy, Gondia
  - ❖ GAPS Power, Aurangabad

#### ✓ Energy Audit at Mazagon Dock Ltd. Mumbai (2011)

- Mazagon Dock Ltd. Is the public sector undertaking under Ministry of Defence making the naval ships for Indian Navy.
- The study involved was complete energy audit study of Compressed Air System, Pumping System, Air Conditioning Systems, Lighting System, Electrical Systems & all other auxiliaries.
- Calculation of losses, suggesting measures and its cost benefit analysis.

### ✓ Solar Photovoltaic Panel Feasibility Study at Mazagon Dock Ltd. Mumbai (2010 & 2012)

 The study involved was feasibility for installing the SPV Pannel in the Mazagon Dock premises on the building roof wherever possible & roof of the workshops

# ✓ PAT (Perform, Achieve & Trade ) assignment for BEE (EESL) for Textile Sector in Punjab. (2011-12)

- BEE is Central Govt. Organisation under Ministry of Power engaged in formulation & implementation of energy saving policies and measures in India.
- The Assignment is for conducting baseline Energy Audit at the six Textile
  Units in Punjab under the category of Dedicated Consumes. The assignment is
  to develop the standards in Energy Consumption for Textile units in India. The
  Standards evolved in the study will be useful for formulating the PAT scheme
- The units covered are
  - ❖ Arihant Spinning Mills, Malerkotla, Punjab
  - Malwa Cotton & Spinning, Barnala, Punjab
  - ❖ Aarti International, Ludhiana, Punjab
  - ❖ Abhishek Industries Ltd (Trident Group) Yarn Division, Barnala , Pujab
  - JCT Ltd. Phagwara, Punjab
  - ❖ Abhishek Industries Ltd (Trident Group) Home Textile Division Barnala, Pujab

- ✓ Has done the Performance Assessment study of the following bio mass / bagasse based power plant for claiming the capital subsidy from MNRE (Ministry of New and Renewable Energy), Govt. of India. (2009-2013)
  - Dwarkadhish Sugar Co-Gen Plant , Satana, Nashik Maharashtra (10 MW Bagasse Based Power Plant having 2500 TCD capacity)
  - Gangakhed Sugar Co-Gen Plant , Gangakhed, Nanded Maharashtra (30 MW Bagasse& Coal Based Power Plant having 6000 TCD capacity)
  - Renuka Sugars Ltd. Co-Gen Plant , Athani, Belgaum Karnataka (23 MW Bagasse Based Power Plant having 9000 TCD capacity)
  - Renuka Sugars Ltd. Co-Gen Plant , Havalaga, Gulbarga Karnataka (25.5 MW Bagasse Based Power Plant having 7500 TCD capacity)
  - Y.M.Krishna SSK . Co-Gen Plant , Rethare, Karad Satara- Maharashtra. (16
     MW Bagasse Based Power Plant having 7500 TCD capacity)
  - Saradambika Power Plant Pvt. Ltd , Chimur Dist- Chandrapur ,Maharsahtra.
     (10 MW biomass based Power Plant)
  - Venkateshwara Power Projects Ltd. At Post- Bedkihal, Tal. Chikodi, Dist. Belgaum, Karnataka (23 MW Bagasse Based Power Plant having 5000 TCD capacity)
  - Purna SSK Ltd. Vasmatnagar, Dist. Hingoli, Maharashtra (18 MW Bagasse Based Power Plant having 2500 TCD capacity)
  - Sonhira SSK, Wangi, Tal. Kadegaon, Dist. Sangli, Maharashtra (22 MW Bagasse Based Power Plant having 4000 TCD capacity)
  - Transtech Green Power (P) Ltd. Kachela Village, Sanchor, Dist. Jalore
     Rajasthan (12 MW biomass based Power Plant)
  - Satyam Power Private Ltd. Punjiyas, Jaroda Kala, Merta Road, Dist. Nagaur,
     Rajasthan (10 MW biomass based Power Plant)
  - Bhairavnath Sugar Works Ltd Tal-Karmala, Dist-Solapur, (Maharashtra) (12
     MW Bagasse Based Power Plant having 2500 TCD capacity)

- ✓ Ratnagiri Gas Power Private Ltd. (RGPPPL) Ratnagiri (Maharashtra). (2013)
  - Illumination Survey of the Lighting System of the overall power blocks of the
     1976 MW Gas Based Combined Cycle Power Plant

### ✓ Waste Heat Recovery Potential Availability for IIP (Institute for Industrial Productivity), New Delhi (2013)

- At present working on the assignment for estimating the Waste Heat Recovery Potential in India for IIP (Institute for Industrial Productivity), New Delhi in Seven Sector
- The sectors covering are Sponge Iron, Cement, Pulp & Paper, Fertilizer, Glass, Petrochemicals, Refineries.

### WORK EPERIENCE – 4 YEARS

### Name of the Energy Auditor: Shri S.P.Bankar, Asst Director \_ Ref. EA-12229

### Year 2012-13

Sr. No.	Energy Audit Assignment
1.	Performance assessment of bio-mass / bagasse power plants for MNRE – 3
2.	Energy audit of RGPPL Compressed Air System
3.	Energy audit of RGPPL Lighting System
4.	Solar feasibility study for MDL

### Year 2011-12

Sr.	Energy Audit Assignment	
No.		
1.	Performance assessment of bio-mass / bagasse power plants for MNRE – 2	
	Nos.	
2.	Energy audit of Royal Seamens Club	
3.	PAT Textile Group III base line energy audit – 6 Nos.	

### Year 2010-11

Sr.	Energy Audit Assignment	No. of
No.		Assignments
1.	Performance assessment of bio-mass / bagasse power plants for MNRE	4
2.	Energy audit of power plant auxiliary – Ratnagiri Gas Power Plant	1
3.	Energy audit of Mazagon Dock Yard	1
4.	Diesel audit for Dempo Mines	1
5.	Energy audit of LIC Residential buildings	1

### Year 2009-10

Sr. No.	Energy Audit Assignment
1.	Bio-mass Power Plant Performance Assessment – 1 Nos.
2.	Energy Audit of Building Water Pumping Systems (Under DSM Program for BEST, Mumbai)
3.	Energy Audit of Indian Sailors Home Society - Building Audit
4.	Energy Audit of Combined Cycle Gas Power Plant - GSEG, Hazira
5.	Heat Rate Assessment of Bio-mass Power Plant for MEDA, Pune