


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

Serial Number: (AEA-291)		As on: (09/05/2018)	
A.			
1	Name of accredited energy auditor	Rajmohan Rangaraj	
2	Father's name	Rangaraj Rudraian	
3	Date of certification as Energy Manager	6 th April 2005	
4	Date of passing the examination in "Energy Performance Assessment for Equipment and Utility Systems"	2004	
5	Examination Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"	EA - 1252	
6	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"	EA – 1252 Certificate No: 0269	
7	Date of issue of accreditation certificate	(to be filled by BEE)	
B. Information in respect of trade name or firms' name			
8	Trade name / firms name under which energy audit is proposed to be conducted	Development Environenergy Services Ltd. (DESL)	
9	Date of accreditation as accredited energy auditor	(to be filled by BEE)	
10	Type of firm/ private/ Government /	Private	

	NGO etc.	
11	Name of contact person along with designation, address, telephone, mobile and fax number along with STD codes and email address (All details compulsory)	Ms. Suseela Raman Designation: Sr. Manager, HR & Project Admin. Development Environergy Services Ltd. (DESL) 819, Antriksh Bhawan, 22 Kasturba Gandhi Marg, New Delhi -110001 Tel: 011- 40791100 Mob: 09582940387 Fax: 011- 40791101 Email: suseelaraman@deslenergy.com
12	Professional postal address with Pin Code of the accredited energy auditor	Development Environergy Services Ltd. (DESL) 819, Antriksh Bhawan, 22 Kasturba Gandhi Marg, New Delhi -110001
13	E-mail address	rajmohan@deslenergy.com
14	Telephone numbers . with STD Code (R) (O) Mobile no:	(R) 09717444012 (O) 011- 40791144 Mob: 09650300612
15	Year of establishment of the trade name / firms' name for undertaking the energy audit	1998
16	Year of commencement of energy audit of the firm	1999
17	Whether any certificate to support the excellence in the system has been obtained (ISO etc.)	"CRISIL-BEE Grade-1 ESCO" certification
18	No. of branch offices (List of complete addresses including heads of all branch offices with telephone, fax and email addresses)	1 branch office at Ahmedabad: D-703, 7th Floor, Titanium Square Thaltej Circle, S.G. Road Ahmedabad –380 054, India Tel: 079- 2970 2878 / 2970 2879 Fax: 079- 2970 2823 Mr. MG Dave, Sr. Consultant (Head of branch office) Email: mgdave@deslenergy.com
C	Details of Associated Energy Experts	

19	Number of resource persons available	32
20	I. Number. of full-time energy auditors in position with work experience of all energy auditors associated with the firm	<p>1. M.G. Dave- AEA 0151 (EA 4701) Over 38 years of professional experience; out of which he has been engaged in carrying out energy audit for electrical and thermal energy consumption in industrial and commercial establishments since 2006. <u>Sectors:</u> Power, sugar, pulp & paper, agriculture, municipal, aluminium, textile, steel, petrochemical, chemical, buildings, etc.</p> <p>2. Shridhar Manure- AEA 0218 (EA 2272) Professional experience of over 25 years, the majority of which has been in the domain of energy efficiency and management. <u>Sectors:</u> Textile, pulp & paper, automotive, municipal, steel, chemical, buildings, power, food & beverages, etc.</p> <p>3. Amitabh Srivastava - AEA 0154 (EA 5483) Over 11 years of experience in energy conservation measures in designated industries. <u>Sectors:</u> Power plant, fertilizer, refinery, integrated steel, chemicals, textiles & cement</p> <p>4. Dipanjan Roy- AEA 0242 (EA 10376) Professional experience of over 16 years in the area of energy management/auditing, machine maintenance, plant maintenance and project management. <u>Sectors:</u> Power plant, petrochemicals, municipal, refinery, fertilizers & aluminium</p> <p>5. Suparno Majumdar- EA 8973 Over 17 years of experience across diverse industries and in various capacities. <u>Sectors:</u> Petrochemicals, municipal, refinery, fertilizers, aluminium, cement, buildings, textile, pulp & paper, refinery, ceramic, iron & steel, MSME, food & beverages, distillery,etc.</p> <p>6. Mehmood Hassan - EA 14811 Over 36 years of professional experience; out of which he has been engaged in carrying out energy audits for electrical and thermal energy consumption in industrial and commercial establishments since 2010. <u>Sectors:</u> Sugar, MSME, municipal, fertilizers, pulp & paper,</p>

textile, iron & steel, etc

7. Sachin Sharma - EA 20095

Over 8 years of experience in utility, project management, engineering and energy management.

Sectors: Municipal, textile, MSME, refinery, iron & steel, food & beverages

8. Abhisheka Nand Jha - EA 26310

Over 5 years of professional experience; primarily engaged in carrying out energy audit for electrical and thermal energy consumption in industrial, municipal & commercial establishments.

Sectors: Municipal, petrochemicals, refinery, textile, pulp & paper, sugar & MSME

9. Kushagra Sagar - EA 28675

Over 3 years of professional experience energy auditing in industrial, municipal and building sectors.

Sectors: Municipal, building, steel re-rolling, MSME, textiles & sugar

10. Kasturi Srikant - EA 18879

Over 12 years of professional experience in energy efficiency projects across a wide range of industrial sectors.

Sectors: Municipal, MSME, building, textile, pulp & paper, steel, automotive, etc.

11. Mithlesh Priya - EA 28138

Over 4 years of professional experience; primarily engaged in carrying out energy audit for electrical and thermal energy consumption in industrial, municipal and commercial establishments. He has also worked in overseas projects for green environment in multiple firms.

Sectors: Municipal, MSME, power plant, steel, pulp & paper, ceramic, sugar, etc.

12. Sunil Sekhar Senapathi - EA 27552

Over 7 years of experience in energy audit & energy analysis, and commissioning support of energy efficiency projects in industries and building sector.

		<p><u>Sectors:</u> Municipal, MSME, building, textile, automotive, steel, pulp & paper, ceramic, etc.</p> <p>13. Ashok Kumar - EA 28670 Over 3 years of professional experience in carrying out energy audit for electrical and thermal energy consumption in industrial, municipal and commercial establishments.</p> <p><u>Sectors:</u> Municipal, sugar, petrochemicals, power plant, distillery, refinery, textile, pulp & paper and buildings</p>
	<p>II. No. of part-time energy auditors in position during the current year / previous year associated with the energy auditor / energy auditor's firms.</p>	<p>Eight (8):</p> <ol style="list-style-type: none"> 1. Dr. J. Nagesh Kumar, Certified Energy Auditor 2. Anjan Majumdar, Certified Energy Auditor 3. Subhash Singh, Certified Energy Auditor 4. Gunapalli Ramanujam, Certified Energy Auditor 5. Rajendra Singh, Certified Energy Auditor 6. Arivalagan Arumugam, Certified Energy Manager 7. Ahammed Kabeer, Certified Energy Auditor 8. V. Dharmarajan, Certified Energy Auditor
21	<p>Sectors in which the energy auditor/energy audit firm has conducted energy audits since inception</p>	<ul style="list-style-type: none"> • Industrial: Aluminium, Automobiles, Auto ancillaries, Bio-chemicals, Breweries and distilleries, Cement, Ceramics, Chemicals, Discoms, Edible Oil, Fertilizer, Food Processing, Glass, Iron & Steel, Metals & Mines, Petro-chemicals, Pharmaceutical, Power Plants, Pulp & Paper, Railways, Refinery, Sugar, Tyre, Tea estates, Textile, etc. • Buildings: Commercial buildings, Government offices, Hospitals, Residential buildings, Airports, Hotels, Telecom centres • MUNICIPAL: Sewage treatment, water pumping stations, street lighting
22	<p>Subject wise expertise</p>	

(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	Pulp and Paper, Petrochemicals, Sugar, Pigment, Ceramics, Chemicals and pharmaceuticals <u>Pulp and Paper</u> : Kuantum Papers Ltd., Process study using COOPERE tool (based on PROSIM) <u>Sugar</u> : Dhampur sugar (Research work for evaporation of spent wash); Olam Sugar-Evaporator simulation study <u>Pigment</u> : English Indian clays Ltd, Trivandrum (Enhancing production output through rotary drier and optimizing energy efficiency) <u>Chemical & pharmaceuticals</u> : Orchid Chemicals and pharmaceuticals Ltd., Alathur, Tamilnadu (Identification of reasons for red patch formation on the roads and providing solution which incidentally resulted in energy conservation)
(b)	Energy audit thermal utility system (list sectors)	Pulp & Paper, Power plants, Iron & Steel, Aluminum, Chloralkai, Railways, Cement, Textiles, Petrochemicals, Sugar, Edible Oil, Tea, Buildings, Glass, Chemicals, Food processing, Breweries and distilleries, Ship yards, Pharmaceuticals, Refineries, Synthetics, Automobiles, Engineering Industries, Ceramics, Fertilizers, MSMEs, SRRMs, etc
(c)	Energy audit electrical utility system (list sectors)	Pulp & Paper, Power plants, Iron & Steel, Aluminum, Chlor-alkali, Railways, Cement, Textiles, Petrochemicals, Sugar, Edible Oil, Tea, Buildings, Glass, Chemicals, Food processing, Breweries and distilleries, Ship yards, Pharmaceuticals, Refineries, Synthetics, Automobiles, Engineering Industries, Ceramics, Fertilizers, MSMEs, SRRMs, etc
23	Instruments available	
	(a) Electrical (list the name of the instruments)	<ol style="list-style-type: none"> 1. Power Analyzer: ALM 31 Krykard – 1 No. 2. Power Analyzer: ALM 20 Krykard – 2 Nos. 3. Power Analyzer: Nanovip Elecontrol Energy – 3 Nos. 4. Power Analyzer: Nanovip plus Elecontrol Energy – 2 Nos. 5. Digital Power Analyzer: Nanovip plus Elecontrol Energy – 1 No. 6. Clamp on Power Meter: 2709 Kusam-Meco – 1 No. 7. Clamp on Power Meter: 2745 Kusam-Meco – 1 No. 8. Digital clamp meter: DM-6046 Lutron – 1 No. 9. Digital Multimeter: DM352 Motwane – 1 No.

		<ol style="list-style-type: none"> 10. Digital Tachometer: Testo 470 Testo - 1 No. 11. Digital Tachometer: Electric automation PVT LTD - 1 No. 12. Digital earth resistance tester: DET-2000 CIE – 2 Nos. 13. Analog earth resistance tester: CIE222M Combrid – 1 No. 14. Digital insulation tester: DIT-99E Meco – 2 Nos. 15. Analog insulation tester: MC-906-02 Meco – 1 No.
	<p>(b) Thermal (list the name of the instruments)</p>	<ol style="list-style-type: none"> 1. Thermal Imager: 868 Testo – 1 No. 2. Vibration Meters: VB 8203 Lutron – 2 Nos. 3. Ultrasonic Flow Meter: Portalok 7S Earth Teknics – 2 Nos. 4. Ultrasonic Flow Meter: MU-HA-CML Maxiflow – 2 Nos. 5. Flue Gas Analyzer: K900Plus KANE – 2 Nos. 6. Flue Gas Analyzer: 905 KANE – 1 No. 7. Vane type Anemometer: AM4201 Lutron – 1 No. 8. Anemometer and DBT temperature meter: 410-1 Testo – 1 No. 9. Digital Anemometer: LCA30 VT Air flow – 1 No. 10. Lux Meter: MS 6610 Mastech – 1 No. 11. Lux Meter: LX-101 Lutron – 1 No. 12. Lux Meter: KM-LUX 99 Kusum-Meco – 1 No. 13. Lux Meter: 540 Testo – 1 No. 14. Lux Meter: LX 101 Lutron – 1 No. 15. Lux Meter: 403125 Extech – 1 No. 16. Temperature and Humidity data Logger: 174 H Testo – 3 Nos. 17. Temperature and Humidity data Logger: Dickson – 1 No. 18. Digital Thermometer: Testo 610 Testo – 2 Nos. 19. Hygrometer: DTH395 Airflow – 1 No. 20. High temperature meter with sensor: 305 CIE – 1 No. 21. Surface and liquid temperature meter with probe: Testo 925 Testo – 2 Nos. 22. Digital temperature indicator with sensor K type: Testo 922 Testo – 2 Nos. 23. IR & K Thermometer: ADT 32 Air Flow – 1 No. 24. Infrared Thermometer: 42510A Extech – 1 No. 25. Infrared Thermometer: Mini temp Raytek – 1 No. 26. Infrared Thermometer: MT 4 Raytek – 1 No. 27. Infrared thermometer: 830-T1 Testo – 1 No. 28. Ultrasonic thickness gauge: Precise – 1 No. 29. Ultrasonic thickness gauge: ITI 1600 India tool & Inst Co – 1 No. 30. Manometer (Differential air pressure meter): Comark – 1 No. 31. Digital Pressure Gauge: MGA 644 Vijay Enterprises – 1 No. 32. Pressure Gauge (Glycerine type): PG- 01 Mass – 1 No. 33. Pressure Gauge (Glycerine type): PG- 02 Micro – 1 No. 34. Pressure Gauge (Glycerine type): PG- 03 Mass – 1 No. 35. Pressure Gauge (Glycerine type): PG- 04 Micro – 1 No.

		36. Pressure Gauge (Glycerine type): PG- 05 Micro – 1 No. 37. Dial Pressure Gauge: IEBIG – 1 No. 38. Dial Pressure Gauge: Altop – 1 No. 39. Dial Pressure Gauge: Mass – 1 No. 40. Dial Pressure Gauge: Waree – 2 Nos. 41. Sound Level Meter: SL-4010 Lutron – 1 No.	
24	Details of training programme/ seminars/ workshops conducted during the last 3 years in the field of energy efficiency / energy audit		
(i)	3 awareness workshops at Surat, Vapi and Kalol in Gujarat under India SME Technology Services Limited's (ISTSL) programme of promoting energy efficiency in micro, small & medium scale (MSME) sectors	Gujarat	2017-18
(ii)	Sensitization workshop at Vapi in Gujarat under the World Bank – Global Environment Facility (GEF) funded Programmatic Framework Project for Energy Efficiency in India (CSAF-6)	Gujarat	November 2017
(iii)	Sensitization workshop at Rajkot in Gujarat under the World Bank – Global Environment Facility (GEF) funded Programmatic Framework Project for Energy Efficiency in India (CSAF-9)	Gujarat	November 2017
(iv)	Hosted a site visit for a delegation from the World Bank, SIDBI and BEE to 2 MSME units in the NCR region. This visit was a part of the Implementation Support Mission of the World Bank organized by SIDBI & BEE	Delhi/NCR	Feb 2017
(v)	Awareness workshop on “Project Development Support for Enhancement of Energy Efficiency Investment in MSME Industries – NCR Cluster”	Faridabad, Haryana	November 2016

(vi)	National level workshop on 'Energy Efficiency Market Transformation - Opportunities for ESCO' in India	New Delhi	August 2016
(vii)	Awareness workshops under World Bank-GEF project energy efficiency financing in MSME sector	Delhi/NCR	May 2016
(viii)	Two Awareness workshops in under World Bank-GEF project energy efficiency financing in MSME sector	Delhi/NCR	April 2016
(ix)	Core group meeting on 'ESCO status in Industries'	New Delhi	April 2016
(x)	Business roundtable on 'Implementation of ESCO performance contract in industrial sector in India'	New Delhi	July 2015
(xi)	Three post audit training workshops in Jalandhar Hand Tools Cluster under GEF-UNIDO-BEE Project	Jalandhar, Punjab	2015-16
(xii)	Three post audit training workshops in Khurja Ceramic Cluster under GEF-UNIDO-BEE Project	Khurja, Uttar Pradesh	2015-16
(xiii)	Three post audit training workshops in Thangadh Ceramic Cluster in under GEF-UNIDO-BEE Project	Thangadh, Gujarat	2015-16
(xiv)	Pre-activity workshop conducted on the topic of "Promoting energy efficiency and renewable energy technology in selected MSME clusters in India"	Jalandhar, Punjab	April 2015
(xv)	Pre activity workshop on the topic of "National Program on Energy Efficiency and Technology Up-gradation in SMEs"	Indore, Madhya Pradesh	June 2015

D	Remarks(if any)

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