

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

Serial Number (AEA-0232)		As on 26/6/2015	
A.			
1	Name of energy auditor	Shri M. A. Patil	
2	Father's name	Appasaheb	
3	Date of certification as Energy Auditor	30 th July 2009	
4	Date of passing the examination in "Energy Performance Assessment for Equipment and Utility Systems"	23-24 May 2009	
5	Examination Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems" (In case of Certified Energy Auditor, please write CEA Registration No.)	EA- 10204	
6	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"	(Not to be submitted at this stage)	
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	Federation of Indian Chambers of Commerce and Industry (FICCI)	
9	Date of accreditation as accredited energy auditor	(to be filled by BEE)	
10	Type of firm/ private/ Government / NGO etc.	Non-government, Not-for-Profit Apex Industry Association	
11	Name of contact person along with designation, address, telephone, mobile and fax number along with STD codes and email address (All details compulsory)	Name: MA Patil (Director) MN Girish (Joint Director) Address: FICCI, Federation house, Tansen Marg,. New Delhi-110001 Tel: 011-23357394, 23487382, Mob: 09868112517 Fax: 011-23721504 Email: ma.patil@ficci.com , mn.girish@ficci.com	
12	Professional postal address with Pin Code of the accredited energy auditor	Federation of Indian Chambers of Commerce and Industry (FICCI), Federation house, Tansen Marg,. New Delhi-110001	

13	E-mail address	ma.patil@ficci.com , mn.girish@ficci.com
14	Telephone numbers . with STD Code (R) (O) Mobile no:	Tel: 011-23359736, 23487382, Mob: 09868112517 Fax: 011-23721504
15	Year of establishment of the trade name / firms' name for undertaking the energy audit	1927
16	Year of commencement of energy audit of the firm	1998
17	Whether any certificate to support the excellence in the system has been obtained (ISO etc.)	Yes (Lead Auditor ISO 14001)
18	No. of branch offices (List of complete addresses including heads of all branch offices with telephone, fax and email addresses)	<p>a. Akhilesh Mahurkar (Director) FICCI Andhra Pradesh State Council 8-2-699/1, 3rd Floor, K R Towers, Road No. 12 Banjara Hills, Hyderabad 500 034 Phone: 040- 23395275-76 , Fax: 040- 23395275- 76 Email: akhilesh.mahurkar@ficci.com</p> <p>b. Mr Param J Shah, (Deputy Director) FICCI Gujarat State Council A-311, Safal Pegasus, 100 ft Road, Pralhadnagar, Ahmedabad - 380 015 Telefax: 079-26937581, 26937582, 26937583 Email: gujarat@ficci.com, param@ficci.com</p> <p>c. Mr. P Radhakrishnan Director FICCI Karnataka State Council VITC Building, 1st Floor, Kasturba Road Bangalore - 560 001 Phone: 080 22861949 Email: p.radhakrishnan@ficci.com</p> <p>d. Mr. Deepak Mukhi (Head) FICCI Western Regional Council Krishnamai Cooperative Housing Society Ltd Ground Floor, Plot No. 33-B, Pochkhanwala Road, Worli , Mumbai - 400 025 Phone: 022-24966633-39 (O), 24968000 (PABX) Fax: 022-24966631-32 Email: drvpanidit@ficci.com, wrc@ficci.com</p> <p>e. Mr Gyan Prakash, (Director) FICCI Rajasthan State Council 202 Rajputana Tower, A-27-B, Shanti Path, Tilak Nagar, Jaipur - 302 004 Phone: 0141 5116464, Fax: 0141 5116464 Email: gyan@ficci.com Mr P Murari Advisor - President, FICCI</p> <p>f. Mr S. Saravanan , (Deputy Director) FICCI Tamil Nadu State Council 2A, Bajaj Manor, 14A, College Road</p>

		Chennai 600006 Phone: 044- 42326329 (D) 42326331, 42327333, 42326330 (Off) , Fax: 044-42326263 Email: saravanan.s@ficci.com
C	Details of Associated Energy Experts	
19	Number of resource persons available	Nine Full time (4 BEE Certified EAs) + FOUR Part time EAs
20 (I)	Number of full-time energy auditors in position with work experience of all energy auditors associated with the firm	<p>1. MA Patil (28 Years) (EA10204)</p> <ul style="list-style-type: none"> ▪ B.E. (Mechanical Engineering, first class) from Shivaji University, Maharashtra in 1984. ▪ Post Graduation in Energy Management (full time 2 year course during 1986-88, Ist Division) from the training institute of the National Productivity Council at Chennai ▪ BEE Certified Energy Auditor (2009) ▪ Director & Head, Resource Conservation & Management division, Federation of Indian Chambers of Commerce and Industry (FICCI), New Delhi ▪ Overall Professional Work Experience : 28 years • Team Leader in conduction of various energy audit Studies : <ul style="list-style-type: none"> • Energy audit at M/s Tata Chemicals, Babrala • Energy audit at M/s Chambal Fertilisers, Kota • Investment grade energy audit of Central Bank of India (CBI), Kolkata • Investment grade energy audit of Indian Association for Cultivation of Science (IACS) • Energy audit at M/s NALCO, (Alu refinery) Damanjodi • Energy audit at M/s BALCO, Korba, Chattisgarh (Alu Smelter + CPP) • Energy audit at M/SesaSterlite, Jharsuguda. • Involved in Baseline Energy Audit of 27 industries in Aluminium, Cement, Fertiliser& Textiles <p>2. MN Girish (16 Years) (EA5499)</p> <ul style="list-style-type: none"> • Accredited Energy Auditor of BEE • Additional Director, Resource Conservation & Management, Federation of Indian Chambers of Commerce and Industry (FICCI), New Delhi • Conducted more than 15 major Energy Audit assignments including BEE Projects like energy audit of industries in Aluminium Sector, Fertilizer, Pulp & Paper, Sugar sector, Chemical industries, Bicycle Manufacturing , Mining, Pharmaceuticals, Commercial Building, Hospitals, Hotels, Lighting system study etc • Baseline Energy Audit of 27 industries in Aluminium, Cement, Fertiliser& Textiles • Organized & Designed more than 80 technical

		<p>conference/seminar/workshop for Energy Conservation</p> <ul style="list-style-type: none"> • Actively took part in implementation of three International Projects <ul style="list-style-type: none"> a. UNIDO project (Ministry of Commerce and Industry) b. CIDA Project for Capacity Building for Energy Manager (Ministry of Power) c. Canadian project for Indian Industrial program for Energy Conservation (Ministry of Power) <p>3. Pushendra Nayak (7 Years)(EA6581)</p> <ul style="list-style-type: none"> • Working as Senior Asst. Director with FICCI, New Delhi • M.Tech. (Energy Management) from School of Energy & Environmental studies, DAVV, Indore • B.E. (Mechanical) from Rajiv Gandhi ProudyogikiVishwavidyalaya, Bhopal • Certified Energy Auditor (Bureau of Energy Efficiency, Govt. of India)- EA 6581 • Conducted more than 40 Energy Audit, water Audit in industries, commercial buildings. • Team member for organizing around 4 technical conference/ seminar/ workshop for Energy Conservation • Adept at performing Energy Efficiency studies & conducting preliminary study and submitting proposal. • Skilled in submitting the reports with savings potential and techno-economic calculations, • Worked on air conditioning system designing, solar system designing, green building designing. <p>4. Amit Kumar Singh (EA 18277)</p> <ul style="list-style-type: none"> • BEE Certified Energy Auditor. • Energy Audit of 210 MW unit of Mettur Thermal Power Station & Tuticorin Thermal Power Station to reduce the Net Heat Rate as per PAT scheme introduced by BEE. • Associated with Petroleum Conservation & Research Association (PCRA), Ministry of P&NG New Delhi as a Consultant for Power Sector. • Hands on experience in commissioning activities of 810 TPH , 155ksc 540⁰C corner fired PF Boiler & 250MW single reheat fully condensing Turbine and handling emergencies. • Planning, scheduling, estimating and preparing L1,L2,L3 schedules to attain monthly work target for erection & commissioning activities of 1500 MW CCPP. • 12 weeks training on supercritical technology from Power Management Institute (NTPC), Noida. • 660 MW (replica of Doosan make boiler & Russian turbine) simulator training from Power Management Institute (NTPC), Noida.
20 (II)	No. of part-time energy auditors in position during the current year /	<p>1. Shashidhar Dhareshwar (Exp-7 Years) (EA2393)</p> <ul style="list-style-type: none"> • M. Tech (Energy Studies), B.E. (Mechanical), BEE

	<p>previous year associated with the energy auditor/ energy auditor's firms.</p>	<p>Certified Energy Auditor.</p> <ul style="list-style-type: none"> • National Certification Examination for Energy Auditors conducted by BEE – 2006, EA-2393 • Indian Green Building Council - Accredited Professional (IGBC-AP) • Experience: Energy Audit, CDM and Renewable energy Consultancy: 3-1/2 years <p>2.Govind Patel (Exp-10 Years) (EA 2438)</p> <ul style="list-style-type: none"> • B E Chemical., PDIS, LEED AP (USGBC, USA). • Electrical Energy Audit as per“Gujarat Use of Electrical Energy (Regulation) order, 1999. • Electrical Energy Audit as per criteria and scope of work given in "Order No. GHU / 99 / 31 / GUE / 1196 / 9018 / K1: whereas and in exercise of the powers conferred by clause (a) of sub section (1) read with sub section (2) of section 6 A of the Bombay Electricity (Special Power) Act, 1946" • Thermal Energy Audit and Process Audit. • Thermal Energy Audit for fossil fuel systems. Process audit for manufacturing of electrical insulators. • Lighting Audit and Software Simulation for various manufacturing units of televisions, washing machines, moulding units, refrigerators, canteens, <p>3.Gulzar Singh (Exp-40 Years) (EA1301)</p> <ul style="list-style-type: none"> • Chemical Engineer • Certified Energy Auditor (Bureau of Energy Efficiency, Govt. of India). • Worked in National Fertiliser Ltd for 35 years • Presently involved as Fertiliser sector Expert with FICCI for Energy audits in Fertiliser plants (Tata Chemicals Babrala, Chambal Fertiliser Kota, Zuari Agro Chemicals Goa) • Also involved as Fertiliser sector Expert with FICCI for PAT M&V audits in Fertiliser plants (GSFC Baroda, RCF Chembur) <p>4.R. Parman</p> <ul style="list-style-type: none"> • B.E. (Electrical) from M.S. University, Baroda. • Professional Development Course in Advanced Energy Auditing from University of Wisconsin, Madison, USA. • Certified Energy Auditor (Bureau of Energy Efficiency, Govt. of India). • In the field of energy conservation since 1986 in India, Middle East Asia (Gulf), South East Asia, Europe and Africa. • Experience of over 600 Energy Audits, covering Industries, Power Stations and Commercial Buildings. • Has conducted over 100 training programmes on energy conservation for executives from industries in India and abroad. • Resource person for BEE-IREDA project for development of Codes and Best Practice Manuals, PCRA's project for development of Best Practice Manuals and IGIDR's project for developing a DSM Plan for Maharashtra.
21	<p>Sectors in which the energy auditor/ energy audit firm has</p>	<p>a) Sectors of FICCI experience in EA where Mr Patil was involved (since 2008) : Aluminium Sector, Fertilizer Sector, Power Plant /CPP Sector, Commercial Building, Bicycle Manufacturing, MSME industries in various sectors, Agri DSM</p>

	conducted energy audits since inception	(EA of Agri Pumps, Demo of new EE Pumps),Municipal DSM (Drinking water pumping, Street Light) b) Other Sectors of FICCI experience in EA (before joining of Patil in 2008) Cement Sector, Textile Sector, Pulp & Paper Sector, Sugar sector, Chemical industries, Engineering Industries, Mining, Pharmaceuticals, Hospitals, Hotels.
22	Subject wise expertise	
(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	<ul style="list-style-type: none"> • Sectors of FICCI experience in EA where Mr Patil was involved (since 2008) : Aluminium Sector, FertilizerSector, Power Plant /CPP Sector, Commercial Building, Bicycle Manufacturing, MSME industries in various sectors • Other Sectors of FICCI experience in EA (before joining of Patil in 2008) Cement Sector, Textile Sector, Pulp & Paper Sector, Sugar sector, Chemical industries, Engineering Industries, Mining,
(b)	Energy audit thermal utility system (list sectors)	<ul style="list-style-type: none"> • Sectors of FICCI experience in EA where Mr Patil was involved in EAs (since 2008) : Aluminium Sector, FertilizerSector, Power Plant /CPP Sector, Commercial Building, Bicycle Manufacturing, MSME industries in various sectors • Other Sectors of FICCI experience in EA (before joining of Patil in 2008) Cement Sector, Textile Sector, Pulp & Paper Sector, Sugar sector, Chemical industries, Engineering Industries, Mining, Pharmaceuticals, Hospitals, Hotels.
(c)	Energy audit electrical utility system (list sectors)	<ul style="list-style-type: none"> • Sectors of FICCI experience in EA where Mr Patil was involved in EAs (since 2008) : Aluminium Sector, FertilizerSector,

		<p>Power Plant /CPP Sector, Commercial Building, Bicycle Manufacturing, MSME industries in various sectors Agri DSM (EA of Agri Pumps, Demo of new EE Pumps) Municipal DSM (Drinking water pumping, Street Lioght)</p> <ul style="list-style-type: none"> • Other Sectors of FICCI experience in EA (before joining of Patil in 2008) <p>Cement Sector, Textile Sector, Pulp & Paper Sector, Sugar sector, Chemical industries, Engineering Industries, Mining, Pharmaceuticals, Hospitals, Hotels.</p>
23	Instruments available	
	(a) Electrical (list the name of the instruments)	<ol style="list-style-type: none"> 1. ALM 10 (Krycard) and Fluke 345 - 1 Phase Continuous & instantaneous Power Analyser 2. ALM-30 (Krycard)- 3 Phase Continuous & instantaneous Power Analyser 3. Lux Meter (Lutron, Sigma) 4. Water Flowmeter (Fluxus ADM 6725) 5. Clamp Meter (KUSAM Meco) 6. Digital Tachometer (KM 2234 BL) 7. Instantaneous Power Analyser (Nanovip (Krycard))
	(b) Thermal (list the name of the instruments)	<ol style="list-style-type: none"> 8. Flue Gas Analyser (TESTO 330, Germany) 9. Digital Thermocouple 10. Pitot tube with digital manometer (Envirotech) 11. Infrared Thermal Imager (Fluke: Ti25) 12. SlingPsychrometer 13. Anemometer (Prova AVM-03) 14. Infrared Thermopointer (CE INF100) 15. Portable_Ultrasonic_Flow_meter(Doppler_Type)(Model_DUFX1-F1 Make: Dynasonics).
24 (i)	Details of training programme/ seminars/ workshops conducted during the last 3 years in the field of energy efficiency / energy audit	<p>More than 40 programs conducted in last 3 year in the area of energy efficiency, energy auditing techniques, energy conservation etc. Name of few programs is as below</p> <ol style="list-style-type: none"> 1. Capacity Building of Energy Auditors : FICCI has conducted 6 Nos of 4 day duration training programs to build capacity of energy auditors, including practicing BEE certified auditors & industry energy managers. The programs were held at Delhi, Chennai, Hyderabad, Ahmedabad& Mumbai). 250 Nos of energy auditors participated. 2. Technical seminar on Energy Efficient Technologies for DC Industries (Conducted 2 day workshops for 6 DC sectors) 3. Industrial Waste Heat Recovery : FICCI conducted 3 Nos of technical conferences on WHR during the last 3 years. 4. Industrial Fuel Switching : 3 Nos Technical conferences

		5. Recent Advancement in Industrial Combustion Tech (2 Nos) 6. Advance Air Handling System (2 Nos) 7. Reliability Improvement in Electrical System (4 Times)
(ii)		
(iii)		

D	Remarks(if any)
	FICCI is anBEE accredited Energy Auditor Agency and is actively involved in undertaking "Mandatory Energy Audits" for DC industries under PAT Scheme. FICCI is also involved in conducting PAT M&V Audits in various DC industries in various sectors.

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

Place: New Delhi

Date: 29th May 2015

Signature:

Name: M A Patil
Designation: Director
For and on behalf of FICCI

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