






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

Serial Number (AEA- 0303)		As on (25 th September, 2019)	
A.			
1	Name of accredited energy auditor	Shri Vinit Priyadarshi	
2	Father's name	Dr. Binod Kumar Sinha	
3	Date of certification as Energy Manager	Energy Auditor – 24/02/2009	
4	Date of passing the examination in “Energy Performance Assessment for Equipment and Utility Systems”	18/02/2009	
5	Examination Registration Number of (i) Energy Manager (ii) “Energy Performance Assessment for Equipment and Utility Systems”	EA – 10296 EA – 10296	
6	Certificate Registration Number of (i) Energy Manager (ii) “Energy Performance Assessment for Equipment and Utility Systems”	Serial No - 6328	
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	Black & Veatch Private Limited	
9	Date of accreditation as accredited energy auditor	(to be filled by BEE)	
10	Type of firm/ private/ Government / NGO etc.	Private	

11	Name of contact person along with designation, address, telephone, mobile and fax number along with STD codes and email address (All details compulsory)	Brahmendra Thakur, Associate Vice President & Regional Area Director, Power Generation Services, Commerzone, Building No-6, 6th Floor, Yerawada, Pune-411006, Mob - 8975767724
12	Professional postal address with Pin Code of the accredited energy auditor	Vinit Priyadarshi, Project Manager & Head Asset Management Services, Commerzone, Buidling No-6, 6th Floor, Yerawada, Pune-411006, Mob- 7447478828
13	E-mail address	priyadarshiv@bv.com
14	Telephone numbers. with STD Code (R) (O) Mobile no:	Office - 02030537397 Mobile - 7447478828
15	Year of establishment of the trade name / firms' name for undertaking the energy audit	2012
16	Year of commencement of energy audit of the firm	2014
17	Whether any certificate to support the excellence in the system has been obtained (ISO etc.)	Kindly refer Annexure 1
18	No. of branch offices (List of complete addresses including heads of all branch offices with telephone, fax and email addresses)	Pune: Black & Veatch Private Limited, Commerzone, Building No-6, 6th Floor, Yerawada, Pune- 411006. Telephone: 020-3053-7200 Fax: 020-3053-7777 Email: bvpl@bv.com Mumbai: Black & Veatch Private Limited, Empire Plaza II, 7th Floor, CST 9, Village Hariyali, LBS Marg, Vikhroli (West), Mumbai - 400 083 Telephone: 022-6212-2222 Fax: 022-6212-2444 Email: bvpl@bv.com
C	Details of Associated Energy Experts	
19	Number of resource persons available	13 Nos.

20	I. Number. of full-time energy auditors in position with work experience of all energy auditors associated with the firm	Energy Auditors – 2 Nos. (9-12 Years) Energy Manager – 2 Nos. (8-10 years)
	II. No. of part-time energy auditors in position during the current year / previous year associated with the energy auditor / energy auditor’s firms.	Not Applicable
	III. Details of full-time energy auditors	
	<p>1. Ravi Sharma (EA – 13374)</p> 	<p>Ravi brings an experience of around 11 years in conventional power generation industry. He is presently working as Lead Performance Optimization Specialist in the Asset Management Services (AMS) group of Black & Veatch India.</p> <p>Ravi holds a degree in Power Engineering (Mechanical) from National Power Training Institute, Durgapur, India and is specialized in power plant operations, efficiency and commissioning. He started his career as operation Engineer at captive power plants of a total capacity of 474 MW. Subsequently, he moved to overlooking complete operations and performance monitoring of the 2X350 MW IPP as shift charge.</p> <p>In addition to his academic credentials, he is also a Certified Energy Auditor and a Certified Energy Manager from “Bureau of Energy Efficiency”, a Certified Six Sigma Green Belt Professional from “KPMG”. He is also a Post Graduate (PGP/MS) in Data Science, Business Analytics & Big Data in association with IBM.</p> <p>Notable Projects in last three years;</p> <ul style="list-style-type: none"> • Heat rate audit for 600 MW Unit 1 of Phase 1 for a confidential client • Comprehensive Energy Audit of Unit 1 of 2X300 MW Phase 1, Lanco Amarkantak Plant • Air and Flue Gas Flow Measurements at 150MW Taqa Neyveli Power • Report on Heat Rate Assessment at Unit-4 (330 MW) and Unit-9 (660 MW) at Adani Power Ltd. Mundra. • Development of real time performance calculation tool for combined cycle plant including heat & mass balance, condenser

		<p>& heater performance, boiler efficiency calculation, turbine leak and stage efficiency calculation, development of flow error (condensate & feed water) calculations.</p>
<p>2. <u>Vijay Anand Marimuthu (EA-19836)</u></p>		<p>Vijay has more than 9 years of experience in Power Plant O&M, ranging from commissioning, operation, maintenance, energy management and OTS Instruction on both Electrical and mechanical fronts. Vijay is a Performance & Optimization Specialist under Asset Management Services within B&V Business based at Pune, India.</p> <p>Vijay holds a bachelor's degree in Electrical & Electronics Engineering from Anna University, Chennai and a P.G Diploma Certificate in Thermal Power Plant Engineering from NPTI, Neyveli. In addition to his academic credentials, he is also a Certified Energy Auditor and Certified Energy Manager by Bureau of Energy Efficiency, India and Certified Auditor for ISO 50001 by DNV-GL, India.</p> <p>Notable Projects in last three years;</p> <ul style="list-style-type: none"> • Condition Assessment of 2X300 MW coal fired power plant of OPGC • Air and Flue Gas Flow Measurements at 150MW Taqa Neyveli Power • Report on Heat Rate Assessment at Unit-4 (330 MW) and Unit-9 (660 MW) at Adani Power Ltd. Mundra.
<p>3. <u>Shruti Verma (EM -19948)</u></p>		<p>Shruti Verma is presently associated with Black & Veatch as a Performance & Optimization Specialist in the Asset Management Section of the Power Generation Services in Black & Veatch, India.</p> <p>Shruti holds a dual Masters' degree in Power System Engineering with specialization in Operation & Commissioning of thermal systems. In addition to her academic credentials, she is also a Certified Energy Manager from "Bureau of Energy Efficiency", Certified BOE from Govt of India, and Certified Internal ISO auditor from Bureau Veritas.</p>

		<p>Notable Projects in last three years;</p> <ul style="list-style-type: none"> • Assessment of turbine modifications and heat rate assessment of 2x170 MW plant of Therma Visayas, Philippines • Report on Heat Rate Assessment at Unit-4 (330 MW) and Unit-9 (660 MW) at Adani Power Ltd. Mundra.
	<p>4. Bibhas Pathak (EM -14328)</p> 	<p>Bibhas Pathak has more than 8 years of experience in power & steel plant operation, maintenance and energy management. Bibhas is a Performance & Optimization Specialist in the Asset Management Section of the Power Generation Services in Black & Veatch, India.</p> <p>Notable Projects in last three years;</p> <ul style="list-style-type: none"> • Energy monitoring information gathering at regular interval. • Maintaining regular agendas of energy consumption and cost estimates. • Performing the work of evaluating, controlling and planning of the use of energy in the firm • Enforcing new modification and strategies to ensure efficient usage of energy. • Maintaining and presenting monthly energy performance report of plant in front of top management. • Performing monthly performance analysis of boiler, condenser and cooling tower as a part of ISO audit. • Maintaining monthly EnMS reports involving baseline creation of energy affecting equipment, motor performance monitoring, condenser and cooling tower as a part of ISO audit.
21	Sectors in which the energy auditor/energy audit firm has conducted energy audits since inception	Power

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	Conventional Power Generation Utilities
(b)	Energy audit thermal utility system (list sectors)	Conventional Power Generation Utilities
(c)	Energy audit electrical utility system (list sectors)	Conventional Power Generation Utilities
23	Instruments available	
	(a) Electrical (list the name of the instruments)	Power Quality Analyzer, Fluke 435-II
	(b) Thermal (list the name of the instruments)	<ol style="list-style-type: none"> 1. Flue Gas Analyzer, Testo 350 2. Ultrasonic Flowmeter, GE PT900 3. Digital Thermometer, Extech SDL200 4. Lux meter, Extech SDL400 5. Thermocouples, K Type Temp Sensor 6. Thermocouples, J Type Temp. Sensor 7. Psychrometer, Dimple 8. Temperature gun, Metrix MT4A 9. Anemometer, Metrix AVM05
24 (i)	Details of training programme/ seminars/ workshops conducted during the last 3 years in the field of energy efficiency / energy audit	Please refer table below.

S NO.	DETAILS OF TRAINING ATTENDED	YEAR	ORGANIZATION
1	Refresher Course for Energy Auditors / Energy Managers	2019	National Productivity Council, Green Tree Building Energy Pvt. Ltd.
2	Certified Energy Manager	2017	Association of Energy Engineers, USA
3	Energy Risk _Professional	2012	Global Association of Risk Professional, Atlanta, USA
4	Business Excellence and Lean Program	2015	Black & Veatch Energy College, Kansas City, USA
5	Electricity Regulation	2013	Reliance Energy Management Institute, Mumbai

S NO.	DETAILS OF TRAINING ATTENDED	YEAR	ORGANIZATION
6	Country Focused Training on Manufacturing Excellence	2008	Japan International Cooperation Agency, Tokyo
7	Power Plant Performance & Efficiency	2007	NTPC Limited
8	Supercritical Technology	2006	NTPC Limited
9	Simulator Training (500 MW)	2005, 2003	NTPC Limited
10	Basic Maintenance Management	2003	NTPC Limited
11	Hydraulics and Pneumatics	2002	Steel Authority of India Limited
12	HVAC Fundamentals	2000	Blue Star Limited.

S.NO	DETAILS OF PAPERS PRESENTED	YEAR	ORGANIZATION
1	Latest Trends in Thermal Power Plant: Centralized Monitoring & Diagnostics	2019	Power Plant Submit 2019
2	Remote Monitoring & Diagnostic Program: An Effective Generation Cost Reduction Strategy	2018	Asia Power Week, PennWell Corporation, Jakarta
3	Opportunities and challenges in execution of O&M services for power generation utilities in India	2018	Black & Veatch Technology Conference, Kansas City, USA
4	ASSET360TM – Demonstration of Smart Analytics Solution	2018	Business Data Analytics for Predictive Maintenance, BHEL
5	Introduction to the EPRI Vista Program	2017, 2016	Aditya Birla Annual O&M Conference, Mumbai
6	Real Time Centralized Monitoring & Diagnostic Program in Adaptive Planning at Power Stations	2017	Asia Power Week, PennWell Corporation, Bangkok
7	Asset management strategies to mitigate cyclic loading effects in base load coal fired power plants	2017	Black & Veatch Technology Conference, Kansas City, USA
8	Power Plant Performance & Efficiency	2017	China Light & Power, New Delhi
9	Fan and Air Heater Performance	2017	China Light & Power, New Delhi
10	Condition Monitoring Techniques	2018	China Light & Power, New Delhi

D	Remarks (if any)

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