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

Serial Number (AEA - 0090) As on :- 26 February, 2013					
A.					
1	Name of accredited energy auditor	Prabir Chattoraj			
2	Father's name	Purnendu Chattoraj			
3	Date of certification as Energy Manager/Energy Auditor	06 <sup>th</sup> April 2005			
4	Date of passing the examination in "Energy Performance Assessment for Equipment and Utility Systems"	August 2004			
5	Examination Registration Number of (i) Energy Manager (i) EA 0016		(20)		
	(ii) "Energy Performance Assessment for Equipment and Utility Systems"	(ii) EA 0016			
6	Certificate Registration Number of				
	(i) Energy Manager				
	(ii) "Energy Performance Assessment for Equipment and Utility Systems"		Photograph of the energy auditor		
7	Date of issue of accreditation certificate	26.05.2014			
В.	Information in respect of trade name or firms' name				
8	Trade name / firms name under which energy audit is proposed to be conducted	Excel Project Consultar	nts Pvt. Ltd.		
9	Date of accreditation as accredited energy auditor	26.05.2014			
10	Type of firm/ private/ Government / NGO etc.	Private Limited Company			



11	Name of contact person along with designation, address, telephone, mobile and fax number along with STD codes and email address ( All details compulsory)	Excel Project Consultants Pvt. Ltd.		
12	Professional postal address with Pin Code of the accredited energy auditor	P-160 Bangur Avenue, Gr. Floor, Block-B Kolkata-700055, West Bengal, India		
13	E-mail address	prabir.chattoraj@gmail.com		
14	Telephone numbers . with STD Code (R) (O) Mobile no:	033- 2570 1025 033-2359 5793 9432642426		
15	Year of establishment of the trade name / firms' name for undertaking the energy audit	2007		
16	Year of commencement of energy audit of the firm			
17	Whether any certificate to support the excellence in the system has been obtained (ISO etc.)	<ol> <li>Lead Auditor for QMS (ISO 9001-2000)</li> <li>Lead Auditor for Environment Management System.</li> </ol>		
18	No. of branch offices  (List of complete addresses including heads of all branch offices with telephone, fax and email addresses)	NIL		
С	Details of Asso	ciated Energy Experts		
19	Number of resource persons available	12		
20	I. Number. of full-time energy auditors in position with work experience of all energy auditors associated with the firm	11 **		
	II. No. of part-time energy auditors in position during the current year / previous year associated with the	01***		



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	energy auditor / energy auditor's firms.			
21	Sectors in which the energy auditor has conducted energy audits since inception	<ol> <li>Power Plant</li> <li>Refineries</li> <li>Chemicals</li> <li>Commercial Buildings</li> <li>Municipalities</li> </ol>		
22	Subject wise expertise	<ol> <li>Electrical Audit</li> <li>Process Audit</li> <li>Thermal Audit</li> <li>Building Audit</li> </ol>		
(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><li>1. Power Plant</li><li>2. Chemicals</li><li>3. Refineries</li></ul>		
(b)	Energy audit thermal utility system (list sectors)	Power Plant     Refineries     Chemicals     Commercial Buildings		
(c)	Energy audit electrical utility system (list sectors)	<ol> <li>Power Plant</li> <li>Refineries</li> <li>Chemicals</li> <li>Commercial Buildings</li> <li>Municipalities</li> </ol>		
23	Instruments available			
	(a) Electrical (list the name of the instruments)	1). Power Analyser, ALM35, Krykard 2). Lux Meter, TM202, Tenmars 3). Multimeter, M63, Motwane 4). Clamp meter, KM2745, Kusam Meco 5). Insulation Meggar		
	(b) Thermal (list the name of the instruments)	<ol> <li>Water Flow Meter, PT 878, GE</li> <li>Contact Thermometer, DT-302-1, HTC</li> <li>Infrared thermometer, 62 max+, Fluke</li> <li>Thermo Hygrometer, KM918, Kusam</li> <li>Anemometer, AVM07, HTC</li> <li>Digital Manometer, PM6205, HTC</li> <li>Flue Gas Analyzer, Summit 712, TPI</li> </ol>		
24 (i)	Details of training programme/ seminars/ workshops conducted during	Training Programmes on Energy Commercial Buildings,		



	the last 3 years in the field of energy efficiency / energy audit	Conservation-As per the annexure of enclosed resume	Refineries, Chemicals, Municipalities.
(ii)			
(iii)			

D	Remarks( if any)
	1. Conducted Energy Conservation (EC) Studies in Guwahati Refinery and set up the EC norms for the first time.
	Deputed as Regional Co-ordinator in PCRA for conducting energy optimization studies in refineries and chemical sector and impart training to the concerned professionals in these sectors.
	<ol> <li>Implementation of ISO 9001-2000 and up gradation of Haldia Refinery QMS.</li> <li>Deputed as Chief Manager, Anti Adulteration Cell (AAC), IOCL-Eastern Region for co-ordination of Anti Adulteration Activities.</li> <li>Writing ECBC code for ODISHA and imparted training on EC &amp; EE to SDA employees and other Government officials.</li> </ol>

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

Place: Kolkata

Date: 04.01.2016

Signature:

Name: PRABIR CHATTORAJ

**Designation**: Accredited Energy Auditor For and on behalf of:

Excel Project Consultants Pvt. Ltd.

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



Excel Project Consultants Private Limited Director

### \*\*Details of item 20. (I) are as mentioned below

## LIST OF FULL TIME AUDITORS

SI. No	Name	Designation	Educational Qualification	Experience in Yrs.	Area of Expertise
1	Pradip Sengupta CEA - 18619	Director	B. Tech - Mechanical	27	Thermal Power Plant, Process Plant, Gas Turbine Power Plant
2	Asish Mandal CEA - 18708	Director	B. Tech - Mechanical	27	Thermal Power Plant, Process Plant, Gas Turbine Power Plant
3	Subir Kumar Ghosh	Director	D.M.E-Mechanical	27	Thermal Power Plant, Process Plant, Gas Turbine Power Plant
4	Prabir Chattoraj CEA - 0016 AEA - 0090	Accredited Energy Auditor	B.Sc - Chemical Engg. PG in Industrial Management	36	Refineries, Chemical, Building, Municipalities.Power Plants.
5	Somnath Sarkar CEM - 5313	Lead Auditor	PGDM -Energy Management	7	Thermal Power, Gas Turbine, Heavy Engineering, Buildings, Municipalities, Petro chemical, Power Audit, Water Audit, Coal Mines, Coal Washery, Cement, Fertilizer, Pulp & Paper, Textiles, Railways
6	Prasun Kumar Mitra	Sr. Consultant	B. Tech - Mechanical	35	Thermal Power Plant
7	Partha Mukherjee	Sr. Engineer	D.M.E - Mechanical	6	Thermal Power, Heavy Engineering, Building Audit
8	Chandan Tiwari	Sr. Engineer	B. Tech - Instrumentation	6	Thermal Power, Heavy Engineering, Building Audit
9	Ajay Kumar Ram	Engineer	B.Tech - Electrical	3	Thermal Power, Gas Turbine, Heavy Engineering, Building
10	Diptarup Sen	Engineer	B. Tech - Power Engineering	2	Thermal Power, Gas Turbine, Heavy Engineering, Building
11	Subedit Das	Engineer	B. Tech - Power Engineering	2	Thermal Power, Heavy Engineering, Building Audit



\*\*\* Details of item 20 (II) are as mentioned below:

#### **LIST OF ASSOCIATED (PART TIME) AUDITORS**

SI. No.	Name	Designation	Educational Qualification	Experience in Yrs.	Area of Expertise
1	Prodip Golder CEA - 11726	Sr. Consultant	AMIE - Electrical B.O.E.	20	Thermal Power Plant, Gas Turbine Power Plant, Building, Cement, Fertilizer, Pulp & Paper, Chemical & Ceramic.

#### SUMMARY PROFILE OF EXCEL PROJECT CONSULTANTS PVT. LTD.

#### **Excel Project Consultants Pvt Ltd**



Date of incoropration- 13 Apr-2007

#### **Area of Business**

Design engineering, Procurement, Erection commissioning supervision, Project management, Overhauling, Operation maintenance, R&M, Trouble shooting, CW water treatment, Energy Audit & energy saving Implementation projects, Water audit, Pump performance testing, HVAC (Project & O & M), Solar PV Installation & Engineering.

#### **Design Engineering**

Design, Const. & Quality Audit of BTG, BOP Elect & C&I syst of 3x33 MW CPP at Tata Power

Bharat Oman Refinery Ltd. Bina

Techno Electric Design engineering of 30 MW TG plant at TCL Mithapur Sova Ispat Limited Review engineering & consultancy for 15 MW at Mejia.

WPIL Limited X country water piping

Steam piping for 127 MW Kondapally & 2X371 MW TPP & 1x371 Lanco Infratech Limited

MW TPP

Tata Chemicals Mithapur Steam system Design of MUW 4AR 900 TPD Salt Plant Tata Chemicals Mithapur Steam system Design of MUW 4 Reconfiguration project

**Erection Commissioning** 

Stabilisation & operation supervision of 300 MW TPP at IOT, Korba **IOTIES Ltd** 

Isgec John Thomption Commg of 1no 150 MW PF Boilers in Gumidipundy OPG Commis of BOP, BTG & Aux. for 3x360 MW TPP at Champa RKM Powergen Pvt. Ltd.

MW TPP at DB Power Champa Commis **DB** Power Limited

BHFL t Tata Power Haldia on lumpsum basis Commg

Commg of TG,BIr & BTG electricals of U# 1 & 2 at at 2x 300 MW TPP at Amarkantak Lanco Infratech Limited

(Lumpsum basis)

Lanco Infratech Limited Commg of TG,BIr of U# 1 & 2 at at 2x 507.5 MW TPP at Udupi

Jindal Steel & Power Limited. Commissioning of 135 MW TPP at JSPL Raigarh

Ansaldo India Limited/BCPL Commissioning 1no 77 MW PF Boilers in Gumidipundy

Mcnally Bharat Eng. Co. Ltd. Mechanical Commissioning services of Balance of Plant of 1x271 MW TPP

Lanco Infratech Limited Commg of TG,BIr of U# 1 & 2 at at 2x 600 MW TPP at Anpara

**Operation Maintenance** 

ISGEC John Thomption O&M supervision of 1x25 MW unit at TPC Tanzania (One year)

Integrated Coal Mining Limited O&M contract for Swyd & Mine Pump Operation at Asansol (5th year continued)

Integrated Coal Mining Limited Solar power plant at Pratapgarh, Kuch, Gujrat

DPSC LTD O&M of 1x12 MW unit at Disargarh

Cresent Power Limited ( CESC) O&M of 1x40 MW TPP at CPL Asansol (7th year conntinued)

Overhauling, R&M, Procurement

ACC Limited, Chaibasa Overhauling, R&M of Electrical system incl procurement, Trouble shooting etc

ACC Limited Supply & services: Synch of both units & intelligent load shedding schme implementation

WBPDCL, BTPS, Bandel 80 MW TG overhauling at Bandel Thermal Power Station, West Bengal

**Energy Audit** 

Cresent Power Limited ( CESC)

Energy Audit of 1x40 MW TPP at Crescent Power Ltd, Asansol (A CESC unit)[Repeat

order on Sep, 2015]

Hindustan Aeronatics Ltd. (HAL) Energy Audit of Hindustan Aeronautics Limited, Kanpur

NEEPCO, Agartala Mandatory Energy Audit of 135 MW combined cycle Power Plant at AGTP, Agartala NEEPCO, Dibrugarh Mandatory Energy Audit of 291 MW combined cycle Power Plant at AGBP, Dibrugarh

APGCL, NTPS Mandatory Energy Audit of Namrup Thermal Power Station, Namrup, Assam

Hindustan Paper Corporation Ltd. Mandatory Energy Audit of Nagaon & Cachar Paper Mill

United Bank Of India Energy Audit of UBI, Head Quarter Building, Kolkata

Amrit Group of Companies Energy Audit of Amrit Agrovet Ltd., Haryana

Post Audit Implementation, Enggineering & procurement for Auxiliary Power Reduction

1x40 MW TPP at Crescent Power Ltd, Asansol (A CESC unit) in three phases

**CW** water treatment

WBPDCL (Sagardighi) Chem.supply & conditioning of CW system, Sg TPP (2x300 MW)

Bhutan Ferro Industries Limited Chem.supply & conditioning of CW system.

WBPDCL (Kolaghat)

Chem.supply & conditioning of CW system, Stage-II U#1,2,3 of 3x 210 MW

WBPDCL (Kolaghat)

Chem.supply & monitoring of CW system, 2x250 MW Santaldih TPS, Unit - 5 & 6

Trouble Shooting PCBL, SEF Sova Ispat,

, Electrosteel, LITL, Bengal Energy-Bangladesh,

a Ispat, als etc.

Core technical group

Pradip Sengupta 26 years experienced Ex BHEL Power Sector Technical services executive Asish Mandal 26 years experienced Ex BHEL Power Sector Technical services executive

Subir Ghosh

26 years experienced Ex Mitsui Babcock Power Sector executive
Shantanu Dutta

20 years experienced in Power Sector at Alstom as entrepreneur

<u>Technological partner</u>

Central Mechanical Engineering Research Institute (CMERI)

<u>Empanelled Consultant</u>

Energy Efficiency Services Ltd. (EESL) under Min. of Power, GOI

Other registrations BEE approved ESCO company for energy conservation

MNRE approved Channel Partner for Solar Power Plant Installation

#### DIRECTORS PROFILE

#### Pradip Sengupta

A Mechanical engineer with 19 years experience in BHEL in the area of Steam Turbine & TG cycle commissioning, Residual Life Assessment, Performance Guarantee & Evaluation tests/audit/ improvement, Aux. power measurement & audit/ Optimisation/Energy management of Power plants, Project management of Large turnkey projects, Engineering & Engineering co-ordination, Procurement & subcontracting of BOP (Balance of Plant) for turnkey projects, Erection & Planning of large Turnkey project execution at sites, Marketing of Power plant products & systems, Cost analysis, control & optimisation of operating cost of Power plants.

#### **Asish Mandal**

A Mechanical engineer with 20 years experience in BHEL in the area of Boiler & Aux commissioning, Performance Guarantee & Evaluation tests / audit / improvement, Aux. power measurement & audit / Optimisation / Energy management of Power plants, Project commissioning of Large turnkey projects, Engineering & Engineering co-ordination, Procurement & subcontracting of BOP (Balance of Plant) for turnkey projects, Erection & Planning of large Turnkey project execution at sites.

#### **Subir Ghosh**

A Mechanical engineer with 20 years experience in ABL (Babcock, UK), THYSSEN KRUPD (LLD Cormany), THERMAX BABCOCK & WILCOX (B. & W, USA), BI ea of Boiler & Auxiliaries commissioning, Residual Life A erformance Guarantee & Evaluation tests /audit/ impro\ power measurement audit/ Optimisation/Enc ent of Power plants, Project commissioning of Large turnkey projects, Engineering & Engineering co-ordination, Procurement & subcontracting of BOP (Balance of Plant) for turnkey projects, Erection & Planning of large Turnkey project execution, Residual life assessment of Boiler at different sites.

Desalination, & Reminarilisation plant commissioning in Middle East with FISIA ITALIAMPIANTI (ITALY)

#### Shantanu Dutta

A Electrical engineer with 18 years experience as entrepreneur in the area of Polusion Control equipments, Power plant electricals, Boiler & Auxiliaries, erection & commissioning, Project execution of Large turnkey projects, Engineering & Engineering co-ordination, Procurement & subcontracting for turnkey projects and industrial projects.

# A. Bhattachariya

A finance & accounts expert with 35 years of experience in the area of finance management, audit, accounting of various companies for financial management & Power plant cost analysis.

#### **EXPERIENCE AVAILABLE WITH OUR EXPERTS**

## <u>Project Management experience of Turnkey Green field projects available with our experts</u>

Project 2x210 MW MP-1& 1x210 MW MP-2 at Bk.T.P.P., & 1x250 MW at STPP, WBPDCL. Scope EPC basis

#### **EPC activities Details**

Preparation of Project WBS, responsibility matrix, fund allocation matrix, plan consisting of L1 & L2 network using Primavera Project management software, Tender-order schedule, T&P mobilisation plan, TO/Billing/Cash projection, Manpower deployment Plan, Engineering Co-ordination, Preparation of specification, floating the tender & order in line with customer requirements, Generation of MIR, Billing & Cash collection, Resolving technical & Contractual issues. Civil, Mech. & Electrical Construction & commissioning.

#### **Erection, Commissioning & Stabilisat**

ce available with our experts.

**E&C and Operation stabilisation experience** in 2x60 MW at CPP VSP, 1x67.5 MW at JPSCL (Presently Tata Power), 1x33 MW CPP at BSSL Meramandali, 1x13 MW CPP at Jindal Stainless Jajpur, 2x110 MW at Barauni, BSEB, 2x110 MW at Muzaffarpur BSEB, 2x210 MW at FGTPP Unchahar (Presently NTPC), & 6x210 MW at KTPP Kolaghat,1x67.5 MW CESC Khidderpur, 2x500MW at FSTPP, 1x30 MW CPP at TISCO, 1x8 MW at IOCL Noonmati, 1X10 MW at DPSCL, Chinakuri, 2x210 MW TG (LMW set) at BTPS DVC, 1x30 MW CPP at RSP SAIL Rourkela, 1x13 MW CPP at ACC Chaibasa, 1x30 MW CPP at TISCO, 2x10 MW CPP at TISCO West Bokaro, 2x10 MW CPP at IBR, Indonesia, 1x30 MW at NEEPCO Kanthalguri, 2x210 MW MP-1 & 1x210 MW MP-2 at WBPDCL Bakreswar **Turnkey**.

Performance tuning & Guarantee/Evaluation test experience available with our experts.

PG test of TG, Boiler and all BOPs including Aux Power measurement experience in 2x210 MW MP-1 & 1x210 MW MP-2 at WBPDCL Bakreswar & 1x210 MW at MTPS, DVC, Mejia. 1X10 MW at DPSCL, Chinakuri & 1x30 MW CPP at RSP, SAIL Rourkela. Performance evaluation test of 1X120 MW at 4th Unit, STPP Santaldih, WBPDCL & 1X56 MW at 3rd Unit, BTPS Bandel WBPDCL.

