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**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Name of accredited energy auditor</td>
<td>Prabir Chattoraj</td>
</tr>
<tr>
<td>2</td>
<td>Father’s name</td>
<td>Purnendu Chattoraj</td>
</tr>
<tr>
<td>3</td>
<td>Date of certification as Energy Manager/Energy Auditor</td>
<td>06&lt;sup&gt;th&lt;/sup&gt; April 2005</td>
</tr>
<tr>
<td>4</td>
<td>Date of passing the examination in “Energy Performance Assessment for Equipment and Utility Systems”</td>
<td>August 2004</td>
</tr>
<tr>
<td>5</td>
<td>Examination Registration Number of (i) Energy Manager</td>
<td>(i) EA 0016</td>
</tr>
<tr>
<td></td>
<td>(ii) “Energy Performance Assessment for Equipment and Utility Systems”</td>
<td>(ii) EA 0016</td>
</tr>
<tr>
<td>6</td>
<td>Certificate Registration Number of (i) Energy Manager</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Date of issue of accreditation certificate</td>
<td>26.05.2014</td>
</tr>
</tbody>
</table>

**B. Information in respect of trade name or firms’ name**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>8</td>
<td>Trade name / firms name under which energy audit is proposed to be conducted</td>
<td>Excel Project Consultants Pvt. Ltd.</td>
</tr>
<tr>
<td>9</td>
<td>Date of accreditation as accredited energy auditor</td>
<td>26.05.2014</td>
</tr>
<tr>
<td>10</td>
<td>Type of firm/ private/ Government / NGO etc.</td>
<td>Private Limited Company</td>
</tr>
</tbody>
</table>
|   | Name of contact person along with designation, address, telephone, mobile and fax number along with STD codes and email address (All details compulsory) | Pradip Sengupta  
Director  
Excel Project Consultants Pvt. Ltd.  
P-160 Bangur Avenue, Gr. Floor, Block-B  
Kolkata-700055, West Bengal, India  
Mobile: **9433084854**  
Ph.: 91-033-2359 5793  
e-mail: [psengupta@epcpl.co.in](mailto:psengupta@epcpl.co.in)  
web: [www.epcpl.net](http://www.epcpl.net) |
|---|---|
| 11 | Professional postal address with Pin Code of the accredited energy auditor | P-160 Bangur Avenue, Gr. Floor, Block-B  
Kolkata-700055, West Bengal, India |
| 12 | E-mail address | prabir.chattoraj@gmail.com |
| 13 | Telephone numbers . with STD Code (R) (O) Mobile no: | 033- 2570 1025  
033-2359 5793  
9432642426 |
| 14 | Year of establishment of the trade name / firms’ name for undertaking the energy audit | 2007 |
| 15 | Year of commencement of energy audit of the firm | |
| 16 | Whether any certificate to support the excellence in the system has been obtained (ISO etc.) | 1. Lead Auditor for QMS (ISO 9001-2000)  
2. Lead Auditor for Environment Management System. |
| 17 | No. of branch offices  
(List of complete addresses including heads of all branch offices with telephone, fax and email addresses) | NIL |
<p>| 18 | Details of Associated 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 firm | 01*** |</p>
<table>
<thead>
<tr>
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</thead>
</table>
| 21 | Sectors in which the energy auditor has conducted energy audits since inception | 1. Power Plant  
2. Refineries  
3. Chemicals  
4. Commercial Buildings  
5. Municipalities |
| 22 | Subject wise expertise | 1. Electrical Audit  
2. Process Audit  
3. Thermal Audit  
4. Building Audit |
|   | 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. Power Plant  
2. Chemicals  
3. Refineries |
|   | Energy audit thermal utility system (list sectors) | 1. Power Plant  
2. Refineries  
3. Chemicals  
4. Commercial Buildings |
|   | Energy audit electrical utility system (list sectors) | 1. Power Plant  
2. Refineries  
3. Chemicals  
4. Commercial Buildings  
5. Municipalities |
| 23 | Instruments available | 1. Power Analyser, ALM35, Krykard  
2. Lux Meter, TM202, Tenmars  
3. Multimeter, M63, Motwane  
4. Clamp meter, KM2745, Kusam Meco  
5. Insulation Meggar |
|   | Electrical (list the name of the instruments) | 1. Water Flow Meter, PT 878, GE  
2. Contact Thermometer, DT-302-1, HTC  
3. Infrared thermometer, 62 max+, Fluke  
4. Thermo Hygrometer, KM918, Kusam  
5. Anemometer, AVM07, HTC  
6. Digital Manometer, PM6205 ,HTC  
7. Flue Gas Analyzer, Summit 712, TPI |
|   | Thermal (list the name of the instruments) | 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.
2. 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.
3. Implementation of ISO 9001-2000 and up gradation of Haldia Refinery QMS.
4. Deputed as Chief Manager, Anti Adulteration Cell (AAC), IOCL-Eastern Region for co-ordination of Anti Adulteration Activities.
5. Writing ECBC code for ODISHA and imparted training on EC & EE to SDA employees and other Government officials.

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

Place: Kolkata

Signature: [Signature]

Date: 04.01.2016

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

## LIST OF FULL TIME AUDITORS

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name</th>
<th>Designation</th>
<th>Educational Qualification</th>
<th>Experience in Yrs.</th>
<th>Area of Expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pradip Sengupta</td>
<td>Director</td>
<td>B. Tech - Mechanical</td>
<td>27</td>
<td>Thermal Power Plant, Process Plant, Gas Turbine Power Plant</td>
</tr>
<tr>
<td></td>
<td>CEA - 18619</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Asish Mandal</td>
<td>Director</td>
<td>B. Tech - Mechanical</td>
<td>27</td>
<td>Thermal Power Plant, Process Plant, Gas Turbine Power Plant</td>
</tr>
<tr>
<td></td>
<td>CEA - 18708</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Subir Kumar Ghosh</td>
<td>Director</td>
<td>D.M.E-Mechanical</td>
<td>27</td>
<td>Thermal Power Plant, Process Plant, Gas Turbine Power Plant</td>
</tr>
<tr>
<td>4</td>
<td>Prabir Chattoraj</td>
<td>Accredited Energy Auditor</td>
<td>B.Sc - Chemical Engg. PG in Industrial Management</td>
<td>36</td>
<td>Refineries, Chemical, Building, Municipalities, Power Plants.</td>
</tr>
<tr>
<td></td>
<td>CEA - 0016 AEA - 0090</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CEM - 5313</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Prasun Kumar Mitra</td>
<td>Sr. Consultant</td>
<td>B. Tech - Mechanical</td>
<td>35</td>
<td>Thermal Power Plant</td>
</tr>
<tr>
<td>7</td>
<td>Partha Mukherjee</td>
<td>Sr. Engineer</td>
<td>D.M.E - Mechanical</td>
<td>6</td>
<td>Thermal Power, Heavy Engineering, Building Audit</td>
</tr>
<tr>
<td>8</td>
<td>Chandan Tiwari</td>
<td>Sr. Engineer</td>
<td>B. Tech - Instrumentation</td>
<td>6</td>
<td>Thermal Power, Heavy Engineering, Building Audit</td>
</tr>
<tr>
<td>9</td>
<td>Ajay Kumar Ram</td>
<td>Engineer</td>
<td>B.Tech - Electrical</td>
<td>3</td>
<td>Thermal Power, Gas Turbine, Heavy Engineering, Building</td>
</tr>
<tr>
<td>10</td>
<td>Diptarup Sen</td>
<td>Engineer</td>
<td>B. Tech - Power Engineering</td>
<td>2</td>
<td>Thermal Power, Gas Turbine, Heavy Engineering, Building</td>
</tr>
<tr>
<td>11</td>
<td>Subedit Das</td>
<td>Engineer</td>
<td>B. Tech - Power Engineering</td>
<td>2</td>
<td>Thermal Power, Heavy Engineering, Building Audit</td>
</tr>
</tbody>
</table>
*** Details of item 20 (II) are as mentioned below:

LIST OF ASSOCIATED (PART TIME) AUDITORS

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name</th>
<th>Designation</th>
<th>Educational Qualification</th>
<th>Experience in Yrs.</th>
<th>Area of Expertise</th>
</tr>
</thead>
</table>

SUMMARY PROFILE OF EXCEL PROJECT CONSULTANTS PVT. LTD.

Excel Project Consultants Pvt Ltd

Date of incorporation: 13 Apr-2007

Area of Business

Design Engineering
- Tata Power: Design, Const. & Quality Audit of BTG, BOP Elect & C&I syst of 3x33 MW CPP at 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
- Lanco Infratech Limited: Steam piping for 127 MW Kondapally & 2X371 MW TPP & 1x371 MW TPP

Erection Commissioning
- IOTIES Ltd: Stabilisation & operation supervision of 300 MW TPP at IOT, Korba
- Isgec John Thompton: Commg of Boiler & Milks of 1no 150 MW PF Boilers in Gumidipundy OPG
- RKM Powergen Pvt. Ltd.: Commis of BOP, BTG & Aux. for 3x360 MW TPP at Champa
- DB Power Limited: Commis of 1x70 MW TPP at DB Power Champa
- BHHEL: Commg of Tata Power Haldia on lumpsum basis
- Lanco Infratech Limited: Commg of TG,Blr & BTG electricals of U# 1 & 2 at at 2x 300 MW TPP at Amarkantak (Lumpsum basis)
<table>
<thead>
<tr>
<th>Company Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lanco Infratech Limited</td>
<td>Commission of TG, Blr of U# 1 &amp; 2 at 2x 507.5 MW TPP at Udupi</td>
</tr>
<tr>
<td>Jindal Steel &amp; Power Limited</td>
<td>Commissioning of 135 MW TPP at JSPL Raigarh</td>
</tr>
<tr>
<td>Ansaldo India Limited/BCPL</td>
<td>Commissioning 1no 77 MW PF Boilers in Gumidipundu</td>
</tr>
<tr>
<td>Mcnally Bharat Eng. Co. Ltd.</td>
<td>Mechanical Commissioning services of Balance of Plant of 1x271 MW TPP</td>
</tr>
<tr>
<td>Lanco Infratech Limited</td>
<td>Commission of TG, Blr of U# 1 &amp; 2 at 2x 600 MW TPP at Anpara</td>
</tr>
<tr>
<td>Jindal Steel &amp; Power Limited</td>
<td>Commissioning of 135 MW TPP at JSPL Raigarh</td>
</tr>
<tr>
<td>Ansaldo India Limited/BCPL</td>
<td>Commissioning 1no 77 MW PF Boilers in Gumidipundu</td>
</tr>
<tr>
<td>Mcnally Bharat Eng. Co. Ltd.</td>
<td>Mechanical Commissioning services of Balance of Plant of 1x271 MW TPP</td>
</tr>
<tr>
<td>Lanco Infratech Limited</td>
<td>Commission of TG, Blr of U# 1 &amp; 2 at 2x 600 MW TPP at Anpara</td>
</tr>
</tbody>
</table>

**Operation Maintenance**

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISGEC John Thompition</td>
<td>O&amp;M supervision of 1x25 MW unit at TPC Tanzania (One year)</td>
</tr>
<tr>
<td>Integrated Coal Mining Limited</td>
<td>O&amp;M contract for Swyd &amp; Mine Pump Operation at Asansol (5th year continued)</td>
</tr>
<tr>
<td>Integrated Coal Mining Limited</td>
<td>Solar power plant at Pratapgarh, Kuch, Gujrat</td>
</tr>
<tr>
<td>DPSC LTD</td>
<td>O&amp;M of 1x12 MW unit at Disargarh</td>
</tr>
<tr>
<td>Crescent Power Limited ( CESC)</td>
<td>O&amp;M of 1x40 MW TPP at CPL Asansol (7th year continued)</td>
</tr>
</tbody>
</table>

**Overhauling, R&M, Procurement**

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC Limited, Chaibasa</td>
<td>Overhauling, R&amp;M of Electrical system incl procurement, Trouble shooting etc</td>
</tr>
<tr>
<td>ACC Limited</td>
<td>Supply &amp; services: Synch of both units &amp; intelligent load shedding scheme implementation</td>
</tr>
<tr>
<td>WBPDCL, BTPS, Bandel</td>
<td>80 MW TG overhauling at Bandel Thermal Power Station, West Bengal</td>
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</table>

**Energy Audit**

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crescent Power Limited ( CESC)</td>
<td>Energy Audit of 1x40 MW TPP at Crescent Power Ltd, Asansol (A CESC unit) [Repeat order on Sep, 2015]</td>
</tr>
<tr>
<td>Hindustan Aeronautics Ltd. (HAL)</td>
<td>Energy Audit of Hindustan Aeronautics Limited, Kanpur</td>
</tr>
<tr>
<td>NEEPCO, Agartala</td>
<td>Mandatory Energy Audit of 135 MW combined cycle Power Plant at AGTP, Agartala</td>
</tr>
<tr>
<td>NEEPCO, Dibrugarh</td>
<td>Mandatory Energy Audit of 291 MW combined cycle Power Plant at AGBP, Dibrugarh</td>
</tr>
<tr>
<td>APGCL, NTPS</td>
<td>Mandatory Energy Audit of Namrup Thermal Power Station, Namrup, Assam</td>
</tr>
<tr>
<td>Hindustan Paper Corporation Ltd.</td>
<td>Mandatory Energy Audit of Nagaon &amp; Cachar Paper Mill</td>
</tr>
<tr>
<td>United Bank Of India</td>
<td>Energy Audit of UBI, Head Quarter Building, Kolkata</td>
</tr>
<tr>
<td>Amrit Group of Companies</td>
<td>Energy Audit of Amrit Agrovet Ltd., Haryana</td>
</tr>
</tbody>
</table>

**Post Audit Implementation, Engineering & procurement for Auxiliary Power Reduction**

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1x40 MW TPP at Crescent Power Ltd, Asansol (A CESC unit) in three phases</td>
</tr>
</tbody>
</table>

**CW water treatment**

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WBPDCL (Sagardighi)</td>
<td>Chem.supply &amp; conditioning of CW system, Sg TPP (2x300 MW)</td>
</tr>
<tr>
<td>Bhutan Ferro Industries Limited</td>
<td>Chem.supply &amp; conditioning of CW system.</td>
</tr>
<tr>
<td>WBPDCL (Kolaghat)</td>
<td>Chem.supply &amp; conditioning of CW system, Stage-II U#1,2,3 of 3x 210 MW</td>
</tr>
<tr>
<td>WBPDCL (Kolaghat)</td>
<td>Chem.supply &amp; monitoring of CW system, 2x250 MW Santaldih TPS, Unit -5 &amp; 6</td>
</tr>
</tbody>
</table>

**Trouble Shooting**

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCBL, SEPL, Electrosteel, LITL, Bengal Energy-Bangladesh, Sova Ispat, etc.</td>
<td>Trouble Shooting</td>
</tr>
</tbody>
</table>

**Core technical group**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pradip Sengupta</td>
<td>26 years experienced Ex BHEL Power Sector Technical services executive</td>
</tr>
<tr>
<td>Asish Mandal</td>
<td>26 years experienced Ex BHEL Power Sector Technical services executive</td>
</tr>
</tbody>
</table>
Subir Ghosh  
26 years experienced Ex Mitsui Babcock Power Sector executive  

Shantanu Dutta  
20 years experienced in Power Sector at Alstom as entrepreneur  

Technological partner  
Central Mechanical Engineering Research Institute (CMERI)  

Empanelled Consultant  
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 KRUPP (L.P. Germany), THERMAX BABCOCK & WILCOX (B & W, USA), BHEL in the area of Boiler & Auxiliaries commissioning, Residual Life Assessment, 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, 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

Project Management experience of Turnkey Green field projects available with our experts
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

Erection, Commissioning & Stabilisation experience 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 Jaipur, 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 Santalidih, WBPDCL & 1X56 MW at 3rd Unit, BTPS Bandel WBPDCL.