



**MP Urja Vikas Nigam Ltd; Bhopal**

**Project: Implementation of “Action plan for Energy Management”**

Tender No 3: **ECAP: B-3**

NOTICE INVITING TENDER: **“FOR HIRING OF CONSULTANT”**

**August 2009**

**MP Urja Vikas Nigam Ltd;**  
**URJA BHAWAN Shiwaji Nagar Bhopal MP**  
**Tel 0755-2767270 fax: 0755-2553122**  
**email: [cmpuvn@bsnl.in](mailto:cmpuvn@bsnl.in)**  
**website: [www.mprenewable.nic.in](http://www.mprenewable.nic.in)**

## NOTICE INVITING TENDER

**MPUVN Ltd; Bhopal – {a BEE State Designated Agency (SDA) of Govt. of MP}** invites offer for assignment given in the table below:

TABLE - A

No .	Tender No	Description of Work *	Tender Fee/ cost (Rs.)	EMD (Rs.)
1	ECAP: B-3	Preparation of list of designated consumers and consumers having connected load above 1000 kW & their energy consumption data	1000	4200
2	ECAP: B-17	Survey of buildings, industries, consumers etc. at state level Prepare commercial building, industries, consumers list as designated consumers	1000	8400
3	ECAP- Manual	Compilation and printing of Manual” (on Energy Conservation and Management)	1000	2000
4	ECAP: Urja	<i>Implementation of Energy efficiency measures in Urja Bhawan, Bhopal</i>	1000	3000

**(\*) Detailed scope of work of individual tender number is attached in Annexure IV with individual bid document**

Under Bureau of Energy Efficiency’s program of Implementation of “Action plan for Energy Management”, Bids are invited from Bidders having adequate qualification & experience in related activity, as per the bid document. In case of downloading the tender document, bid/tender fee of Rs.1000/- would be required at the time of submission of tender & intimation in writing must be sent to this effect to MPUVN on the email address or postal address mentioned here.

**Bids submitted should be accompanied by the Tender Fee and Earnest Money Deposit as given above, in the form of cash at MPUVN’s finance section or in the form of DD drawn on any Nationalized Bank/ Scheduled Bank in favor of MPUVN Ltd; Bhopal payable at Bhopal.**

Bids are to be submitted in three parts (in three different envelopes) as per details given below:

Sr. No.	Attachments
	<b>Part - I</b>
1.	Proof of Earnest Money Deposit as per tender condition & proof of cost of tender document
	<b>Part - II Technical Bid</b>
1.	The original document duly signed & sealed on every page, as a confirmation of acceptance of the terms & conditions of the document.
2.	Declaration of the Bidder about any relatives working with MPUVN as per ANNEXURE - I of the Bid Document
3.	Details of Technical Manpower available for execution of the assignment (with brief Bio-data of Key Personnel) as per ANNEXURE - III of the Bid Document.
4.	Details of experience in the field of Energy conservation/similar work done in last two years along with copies of the orders or certificates from the clients. as per ANNEXURE - III of the Bid document
5.	List of major clients along with the contact persons and their contact nos as per ANNEXURE - III
6.	Proof of Registration with BEE / MPUVN/ any other Govt. agency if any
7.	Proof of PAN
8.	Proof of Service Tax Number /Tin number (if applicable)
9.	Declaration Letter on official letter head of bidder stating that "We are not black-listed by any Central / State Government / Public Sector Undertaking in India" Duly signed by the authorized signatory with date & seal as per ANNEXURE - II of the Bid Document.
	<b>Part - III Financial Bid</b>
1.	Schedule of Rates as per ANNEXURE - V

Bids submitted by you should be valid up to March 31, 2010. Sealed Bids, duly super scribed on the envelop as should reach to The Superintending Engineer, Energy Management Cell , MPUVN on or before 1st September, 2009 up-to 1.00 P.m.

Part - I: Proof of Earnest Money Deposit and proof of cost of tender document as per tender condition of the offers received shall be opened on 1st September, 2009 at 3.30 p.m. at MPUVN's office. In case of non-receipt of EMD and cost of tender document as per NIT no further parts of the bids will be opened.

Part – II: Technical offers of the offers received shall be opened on 1st September 2009 at 3.30 p.m. at MPUVN's office.

Part – III: Financial Bid of only those successful consultants who technically qualify in part I and part II may be opened on the same date in the afternoon.

MPUVN may at its discretion change the date & time of opening of the offers without assigning any reasons thereof. In the event of any change in the schedule, the same shall be communicated to you in time.

Managing Director, MPUVN reserves the right to reject any/all offers without assigning any reasons thereof.

Superintending Engineer  
MPUVN Ltd; Bhopal

### **Critical Information**

Availability of tender	<u>10<sup>th</sup> August '09</u> to 31st August 09 between 11:00 AM and 05PM
Last date for receipt of tender	up-to 1PM on 1st September <u>2009</u>
Time and Date of opening of tender	03:30 PM on 1st September <u>2009</u>
Place of opening of tender	MP Urja Vikas MPUVN Ltd; URJA Bhawan Shiwaji Road Bhopal
Contact Person for queries	Shri Bhuvnesh Kumar Patel Superintending Engineer (I/c <u>Energy Management cell</u> ) MPUrja Vikas MPUVN Ltd; Shiwaji Nagar Bhopal MP <b>Tel 0755-2767270 fax: 0755-2553122</b> <b>email: cmpuvn@bsnl.in</b>
Contact Person for submission of tender	Shri Bhuvnesh Kumar Patel Superintending Engineer (I/c <u>Energy Management cell</u> ) MPUrja Vikas MPUVN Ltd; Shiwaji Nagar Bhopal MP <b>Tel 0755-2767270 fax: 0755-2553122</b> <b>email: cmpuvn@bsnl.in</b>

### **CORRIGENDUM-2**

Tender notice (vide no: MPUVN/ECAP-09/1413) for the Energy efficiency related works had been published by the Nigam up-to 1<sup>st</sup> September 2009, then extended up-to 14<sup>th</sup> September; due to some administrative reason the time period is once again extended (**only for ECAP:B-3; ECAP:B-17; ECAP-Manual; ECAP-Urja**) as: last date of issue of tender document – 23<sup>rd</sup> Sep.'09; last date/ time for receiving the filled document- 24<sup>th</sup> Sep '09 at 1PM and opening of tender document on 24<sup>th</sup> Sep '09 at 3:30 PM in Nigam's office. Those who have

submitted the tender need not submit again. All other term & condition will remain the same. Details can be seen in our website [www.mprenewable.nic.in](http://www.mprenewable.nic.in)

Superintending Engineer

**Short term tender Notice  
3<sup>rd</sup> Call**

Tender notice (vide no: MPUVN/ECAP-09/1413 dt.10/08/09) for the Energy efficiency related works had been published by the Nigam up-to 1<sup>st</sup> September 2009, then due to some administrative reason the time period was extended up-to 14<sup>th</sup> September (vide corrigendum MPUVN/ECAP-09/390 dt. 2/9/9). MPUVN, 3<sup>rd</sup> times invites separate Bids, from consultants and other eligible agencies for below mentioned tenders: **ECAP:B-3; ECAP:B-17; ECAP-Manual; ECAP-Urja**. Document can be obtained from 16<sup>th</sup> October 2009 during office time and last date of issue of tender document – 31<sup>st</sup> October '09; last date/ time for receiving the filled document- 3<sup>rd</sup> November '09 at 1PM and opening of tender document on 3<sup>rd</sup> November '09 at 3:30 PM in Nigam's office. Those who have submitted the tender need not submit again. All other term & condition will remain the same. Details can be seen in our website [www.mprenewable.nic.in](http://www.mprenewable.nic.in)

Superintending Engineer

**MADHYA PRADESH URJA VIKAS NIGAM LIMITED  
(M. P. GOVT. UNDERTAKING)**

Main Road No. 2, Urja Bhawan, Near 5 No Bus Stop,  
Shivaji Nagar, BHOPAL – 462 016 (MP)

**Tender document is issued to/ downloaded from website by M/s**

.....  
.....

Tender documents cost have been deposited vide cash receipt / D.D.No ..... dated ..... for Rs ..... Against: **NIT NO. MPUVN / ECAP-09 (ECAP: B-3) Dated:**

**Tender No: MPUVN / ECAP-09 (ECAP: B-3) Subject: Implementation of "Action plan for Energy Management.**

**Earnest Money:**

As per items mentioned in **NIT NO.MPUVN/ ECAP-09 (ECAP: B-3) DATED -----**

**Last Date & Time for submission of Tender up to 1 PM on 31/08/2009**

**Date and Time of Opening of Tender:** 1st September 2009 at 3.30 P.M. If due to any reason the due date is declared public holiday, tender will be accepted and opened on the next working day as per same time schedule.

**INSTRUCTIONS TO BIDDERS;-**

1. Rates quoted must be firm and fixed.
2. The terms and conditions, agreement, declaration, ANNEXURE & Rate Sheets must be returned duly signed and stamped on each page in token of acceptance. All pages of the documents must be completed duly signed and office stamp/seal affixed.
3. Rates once accepted shall be valid up to 31/ 03/2010.
4. Deviation in terms and conditions etc or conditional tenders/ offers. will not be accepted.
5. For the works mentioned in the NIT, token EMD is proposed. However, it may be appropriately enhanced as per MPUVN's rules if required and bidder would be asked to deposit the same before placement of work order.

**SIGNATURE OF ISSUING AUTHORITY**

**With Seal**

(Superintending Engineer)

**(On the letterhead of the Company)**

**Ref:**

(To be addressed to the Superintending Engineer M.P. Urja Vikas Nigam Limited, Urja Bhawan, Near 5 No. Bus Stop, Main Road No.2, BHOPAL – 462 016.)

**Sub: Tender for Implementation of “Action plan for Energy Management.**

Name and full postal address of the firm/consultant submitting the tender;

M/s .....

Reference: NIT NO.MPUVN/ECAP-09(ECAP: B-3) DATED -----  
-----

The tender fee amounting to Rs.1000.00 has been deposited / is being deposited vide Cash Receipt / DD No.....Dated .....of ..... bank.

2. I/ We agree to abide by all the conditions as mentioned in the Notice Inviting Tender issued by the Superintending Engineer, M.P. Urja Vikas MPUVN Limited, Bhopal, and also further conditions of the said tender document given in the attached sheets, all the pages of which have been signed and company stamp affixed by us as acceptance of the terms and conditions mentioned therein.

4 Rates once accepted and are communicated to the bidder, the bidder shall have to enter into an agreement in the enclosed format for the acceptance of rates valid up to 31/ 03 /2010.

5. Demand Draft No. \_\_\_\_\_ dated \_\_\_\_\_ (or MPUVN's MR no: \_\_\_\_\_ Dt. \_\_\_\_\_ ) for Rs. \_\_\_\_\_ of \_\_\_\_\_ bank drawn in favour of M.P. Uria Vikas Nigam Limited payable at Bhopal as mentioned in NIT, against Earnest Money Deposit is enclosed.

**SIGNATURE OF THE BIDDER  
WITH SEAL**

**(On the letterhead of the Company)**

**UNDERTAKING**

I .....  
.....

S/o Shri .....

Resident of .....

being ..... of M/s.....

.....whose service tax No. is .....,TIN

Number (if applicable)-----and Income Tax PAN No. is

..... Hereby give consent to the Madhya Pradesh Urja Vikas

MPUVN Ltd. Bhopal to deduct from our bills whatever amount payable by us on account of the Commercial Tax / VAT and IT dues etc., if any, demanded by the concerned departments.

For and on behalf of the Bidder

Place:

Dated:

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Seal

## 1. BACKGROUND INFORMATION

### About State Designated Agency (SDA)

The mission of State Designated Agency (SDA) and Bureau of Energy Efficiency (BEE) is to develop policies and strategies with a thrust on self-regulation and market principles, within the overall framework of the Energy Conservation Act (EC Act), 2001 with the primary objective of reducing energy intensity of the Indian economy. This will be achieved with active participation of all stakeholders, resulting in accelerated and sustained adoption of energy efficiency in all sectors.

The Energy Conservation Act came into force in March 2002. The setting up of Bureau of Energy Efficiency (BEE) and subsequently, **MP Urja Vikas Nigam Ltd; Bhopal** one of the SDA provides a legal framework for energy efficiency initiatives in the country/State. The Act empowers the Central Government and in some instances the State Governments to:

Notify energy intensive industries, other establishments, and commercial buildings as designated consumers. Establish and prescribe energy consumption norms and standards for designated consumers.

Direct designated consumers to -

- Designate or appoint certified energy manager in charge of activities for efficient use of energy and its conservation.
- Get an energy audit conducted by an accredited energy auditor in the specified manner and intervals of time.

Furnish information with regard to energy consumed and action taken on the recommendation of the accredited energy auditor to the designated agency.

Comply with energy consumption norms and standards, and if not so, to prepare and implement schemes for efficient use of energy and its conservation.

Prescribe energy conservation building codes for efficient use of energy and its conservation in commercial buildings.

Amend the energy conservation building codes to suit regional and local climatic conditions.

Direct owners or occupiers of commercial buildings to comply with the provisions of energy conservation building codes.

Direct mandatory display of label on notified equipment and appliances.

Specify energy consumption standards for notified equipment and appliance. Prohibit manufacture, sale, purchase and import of notified equipment and appliances not conforming to standards.

The Energy Conservation Act, 2001 defines the powers of the State Government to facilitate and enforce efficient use of energy and its

conservation. The State Governments have to designate State Designated Agencies in consultation with the Bureau of Energy Efficiency to coordinate, regulate and enforce the provisions of the Act in the State. Thus the State Designated Agencies are the strategic partners for promotion of energy efficiency and its conservation in the country.

**1.1 Organization:** MP Urja Vikas Nigam Ltd; Bhopal

Under the provisions of the Energy Conservation Act, 2001, State Designated Agency has been established with effect from 20/08/2002

The mission of the State Designated Agency is to assist in developing policies and strategies with a thrust on self-regulation and market principles, within the overall framework of the Energy Conservation Act, 2001 with the primary objective of reducing energy intensity of the Indian economy. This will be achieved with active participation of all stakeholders, resulting in accelerated and sustained adoption of energy efficiency in all sectors.

**1.1.1 Functions of SDA**

SDA co-ordinates with designated consumers, designated agencies and other organizations; recognizes, identifies and utilizes the existing resources and infrastructures, in performing the functions assigned to it under the E.C Act, 2001. The Act provides for regulatory and promotional functions:

The major functions of SDA include:

Develop and recommend to the Central Government the norms for processes and energy consumption standards.

Develop and recommend to the Central Government the minimum energy consumption standards and labeling design for equipment and appliances.

Develop and recommend to the Central Government the specific energy conservation building codes.

Recommend the Central Government for notifying any user or class of users of energy as a designated consumer.

Take necessary measures to create awareness and disseminate information for efficient use of energy and its conservation.

**1.2 The Energy Conservation Act, 2001**

The Energy Conservation Act, 2001 (ECA) forms the core of the legal framework put in place by India to promote energy efficiency and conservation. ECA came into force with effect from March 1, 2002. Some important sections of ECA are:

- Section 1 – Short title, extent and commencement
- Section 2 – Definitions
- Section 13 – Powers and functions of the BEE

- Section 14 – Power of Central Government to Facilitate and Enforce Efficient use of Energy and its Conservation
- Section 15 - Power of State Government to Facilitate and Enforce Efficient use of Energy and its Conservation
- Section 16 – Constitution of State Energy Conservation Fund
- Section 17 – Power of Inspection
- Section 18 – Power of Central Government to issue directions
- Section 41 – Restriction on Civil Courts
- Section 42 - Appeal to High Court
- Section 44 – Offences triable by Special Courts
- Section 48 - Authorities under the Act
- Section 26 – Penalties and Adjudication
- Section 30 – Appellate Tribunal for Energy Conservation
- Section 48 – Default by Companies
- Section 52 – Power to obtain Information
- Section 56 – Power of Central Government to make rules
- Section 57 – Power of State Government to make rules
- Section 58 – Power of BEE to make regulations
- Section 62 – Power to remove difficulties

### **1.3 Obligations under EC Act relevant to Survey, Compilation and Analysis of data for Energy Conservation**

Section 52 of ECA lays down following obligations on Designated Consumers:

“Every designated consumer or manufacturer of equipment or appliances specified under clause (b) of section 14 shall supply the Bureau with such information, and with such samples of any material or substance used in relation to any equipment or appliance, as the Bureau may require.”

Further, section 14 of the ECA provides for the following:

The Central Government may, by notification, in consultation with the Bureau, —

specify the norms for processes and energy consumption standards for any equipment, appliances which consumes, generates, transmits or supplies energy;

specify equipment or appliance or class of equipments or appliances, as the case may be, for the purposes of this Act;

prohibit manufacture or sale or purchase or import of equipment or appliance specified under clause (b) unless such equipments or appliances conform to energy consumption standards;

Provided that no notification prohibiting manufacture or sale or purchase or import or equipment or appliance shall be issued within two years from the date of notification issued under clause (a) of this section;

direct display of such particulars on label on equipment or on appliance specified under clause (b) and in such manner as may be specified by regulations;

specify, having regard to the intensity or quantity of energy consumed and the amount of investment required for switching over to energy efficient equipments and capacity or industry to invest in it and availability of the energy efficient machinery and equipment required by the industry, any user or class of users of energy as a designated consumer for the purposes of this Act;

alter the list of Energy Intensive Industries specified in the Schedule;

establish and prescribe such energy consumption norms and standards for designated consumers as it may consider necessary:

Provided that the Central Government may prescribe different norms and standards for different designated consumers having regard to such factors as may be prescribed;

direct, having regard to the quantity of energy consumed or the norms and standards of energy consumption specified under clause (a) the energy intensive industries specified in the Schedule to get energy audit conducted by an accredited energy auditor in such manner and intervals of time as may be specified by regulations;

direct, if considered necessary for efficient use of energy and its conservation, any designated consumer to get energy audit conducted by an accredited energy auditor;

specify the matters to be included for the purposes of inspection under sub-section (2) of section 17;

direct any designated consumer to furnish to the designated agency, in such form and manner and within such period, as may be prescribed, the information with regard to the energy consumed and action taken on the recommendation of the accredited energy auditor;

direct any designated consumer to designate or appoint energy manager in charge of activities for efficient use of energy and its conservation and submit a report, in the form and manner as may be prescribed, on the status of energy consumption at the end of the every financial year to designated agency;

prescribe minimum qualification for energy managers to be designated or appointed under clause (l);

direct every designated consumer to comply with energy consumption norms and standards;

direct any designated consumer, who does not fulfill the energy consumption norms and standards prescribed under clause (g), to prepare a scheme for efficient use of energy and its conservation and implement such scheme keeping in view of the economic viability of the investment in such form and manner as may be prescribed;

prescribe energy conservation building codes for efficient use of energy and its conservation in the building or building complex;

amend the energy conservation building codes to suit the regional and local climatic conditions;

direct every owner or occupier of the building or building complex, being a designated consumer to comply with the provisions of energy conservation building codes for efficient use of energy and its conservation;

direct, any designated consumer referred to in clause (r), if considered necessary, for efficient use of energy and its conservation in his building to get energy audit conducted in respect of such building by an accredited energy auditor in such manner and intervals of time as may be specified by regulations;

take all measures necessary to create awareness and disseminate information for efficient use of energy and its conservation;

arrange and organise training of personnel and specialists in the techniques for efficient use of energy and its conservation;

take steps to encourage preferential treatment for use of energy efficient equipments or appliances:

Provided that the powers under clauses (p) and (s) shall be exercised in consultation with the concerned State.

Thus there are three obligations of reporting entities under ECA i.e. maintenance of records, furnishing information to BEE and implementing energy conservation measures to reduce energy consumption in terms of norms or other measures prescribed.

#### **1.4 Notifications**

The Central Government is in the process of issuing appropriate notifications relevant to collection of information first by notifying following Designated consumers for the purpose of the said Act :-

1. Thermal power stations-30,000 metric tonne of oil equivalent (MTOE) per year and above.
2. Fertilizer-30,000 metric tonne of oil equivalent (MTOE) per year and above.
3. Cement – 30,000 metric tonne of oil equivalent (MTOE) per year and above.
4. Iron and Steel – 30,000 metric tonne of oil equivalent (MTOE) per year and above.
5. Chlor-Alkali – 12,000 metric tonne of oil equivalent (MTOE) per year and above.
6. Alumimium – 7,500 metric tonne of oil equivalent (MTOE) per year and above.

7. Railways – (a) One traction substation in each Zonal Railway having maximum energy consumption. (b) One Diesel loco shed in each Zonal Railway as operation and maintenance is standardized on Indian Railways.  
{All six Production Units i.e. ICF, RCF, CLW, DLW, DCW, & RWF. Workshops on Indian Railways having total annual energy consumption of 30,000 MTOE or more.}
8. Textile – 3,000 metric tonne of oil equivalent (MTOE) per year and above.
9. Pulp & Paper – 30,000 metric tonne of oil equivalent (MTOE) per year and above.

For the purpose of declaring energy intensive industry or any other establishment specified in the Schedule to the Act, the limit of connected load and annual energy consumption in terms of metric tonne of oil equivalent shall be reviewed in every three years with effect from the date of this notification. However, provisions mentioned in these rules shall not be applicable to the Ministry or Department of the Central Government dealing with Defence, Atomic Energy, Space, Internal security or Undertakings or Boards or Institutions under the control of such Ministries of Department. Commercial buildings having a connected load in excess of 500 KW will be notified in the next phase.

#### **1.5 The statute requires that each Designated Consumer shall:**

(a) Designate or appoint an energy manager having minimum qualification specified in the Energy Conservation (minimum qualification for energy managers) Rules, 2006; and

(b) submit a report in electronic form as well as hard copy to the designated agency with a copy to Bureau of Energy Efficiency, on the status of energy consumption at the end of every financial year as prescribed in the Energy Conservation (the form and manner for submission of report on the status of energy consumption by designated consumers), Rules, 2007.”

#### **1.6 Maintenance of Records, Procedure and manner of furnishing information:**

The respective energy manager of the Designated Consumer appointed or designated for this purpose, will be responsible for authenticating and furnishing the information to the SDA and BEE in the prescribed form.

#### **1.7 Stakeholders**

The stakeholders would be SDA, BEE include the Ministry of Power and other related Ministries of the Government, State Governments and their Designated Agencies, employees, reporting entities, Designated Consumers, regulatory agencies, multilateral organizations, NGOs, etc.

## PROJECT OVERVIEW

### **Project Objective**

The objective of the project: Implementation of “Action plan for Energy management

### **Project scope:**

#### **The scope of the work includes:**

Following activities are required to be done under this title -

1. Prepare a list of Designated Consumers with all relevant details as per form 1 (enclosed as annexure X)
2. Prepare a list of consumers having connected load of more than 1000 kW.
3. Prepare a list of Energy Managers/ Energy Auditors/ ESCOS/ DISCOMS/ Energy Audit Firms with industry specialization along with the details as per annexure Y

4. Collect information from Designated Consumers as per form 1 (enclosed as annexure X) for the financial year 2007-08 and 2008-09 as per the information received from designated consumers.
5. Evaluation of MTOE & demonstration of the same to every Designated Consumer.
6. Making necessary arrangement for formatting data linkage as per requirement.
7. Facilitate to the person concern for data entry.

If required, MPUVN may ask the bidder / consultant to make detailed presentation of their work before making payments.

**Time frame to complete the work: Two months from the date of Agreement.**

## **2.0 CHECK LIST**

Bidders are required to ensure that your Tender submitted to MPUVN is complete in all respects, they have go through the following checklist & tick mark for the enclosures attached with the Tender:

Sr. No.	Attachments	Attached	Not
---------	-------------	----------	-----

			<b>Attached</b>
	<b>Part - I</b>		
1.	Proof of Earnest Money Deposit as per tender condition & proof of cost of tender document		
	<b>Part - II Technical Bid</b>		
1.	The original document duly signed & sealed on every page, as a confirmation of acceptance of the terms & conditions of the document.		
2.	Declaration of the Bidder about any relatives working with MPUVN as per ANNEXURE - I of the Bid Document		
3.	Details of Technical Manpower available for execution of the assignment (with brief Bio-data of Key Personnel) as per ANNEXURE - III of the Bid Document.		
4.	Details of experience in the field of Energy conservation/similar work done in last two years along with copies of the orders or certificates from the clients. as per ANNEXURE - III of the Bid document		
5.	<b>List of major clients along with the contact persons and their contact nos as per ANNEXURE - III</b>		
6.	Proof of Registration with BEE / MPUVN/ any other Govt. agency if any		
7.	Proof of PAN		
8.	Proof of Service Tax Number		
9.	Declaration Letter on official letter head of bidder stating that "We are not black-listed by any Central / State Government / Public Sector Undertaking in India" Duly signed by the authorized signatory with date & seal as per ANNEXURE - II of the Bid Document.		
	<b>Part - III Financial Bid</b>		
1.	Schedule of Rates as per annexure V		

### 3.0 GENERAL INFORMATION ABOUT THE BIDDER

<b>1</b>	<b>Name of the Bidder</b>	
<b>2</b>	<b>Type of Company</b> (pl. highlight / tick mark appropriate category and attach Proof of Company Registration.)	- Individual / Proprietary Firm - Partnership Firm - Pvt. Limited - Govt. / semi Govt. - Others (pl specify _____)
<b>3</b>	<b>Professional Registration</b> (Attach copies of certificate / proof)	- BEE - MPUVN - Others
<b>4</b>	<b>Postal Address</b>	
<b>5</b>	<b>Telephone/Fax No</b>	
<b>6</b>	<b>E-mail address &amp; URL</b>	
<b>7</b>	<b>Name and designation of the Representative of the Bidder to whom all reference shall be made to expedite technical co-ordination.</b>	Mr. _____ (with contact details)
<b>8</b>	<b>Amount and reference of the Earnest Money Deposit.</b>	Rs. _____ DD No: _____ Date: _____ Bank:
<b>9</b>	<b>Details of Technical Manpower</b> (Furnish information as per ANNEXURE III.)	
<b>10</b>	<b>Details of previous Work Experience</b> (including that with MPUVN, if any) as per ANNEXURE - III	
<b>11</b>	Has the company any relative, working in MPUVN, if yes, state the name, designation & relationship.	
<b>12</b>	Year of Registration/Incorporation	
<b>13</b>	Service tax Number	
<b>14</b>	PAN	
<b>15</b>	TIN (if applicable)	

## 4.0 INSTRUCTIONS TO THE BIDDER

- A.1** Offer should be submitted complete in all respects with all schedules, documents etc. of the Bid document issued by MPUVN.
- A.2** Bids shall be received in MPUVN office up-to the date and time as mentioned in the NIT (notice inviting tender). If due to any reason the due date is declared public holiday, tender will be accepted and opened on the next working day as per same time schedule.
- A.3** MPUVN reserves the rights to reject any or all the Bids or accept any Bid in total or in part or may divide the work among various Bidders.
- A.4** Offers should be accompanied with requisite Earnest Money Deposit (EMD). Any offer not accompanied by Earnest Money Deposit (EMD) shall be disqualified and no further consideration shall be given to such Offer. Bidders may note that no relaxation in this regard shall be made. Bidders may further note Conditional offers shall not be accepted.
- A.5** If any information provided by the bidder is found to be concealed, suppressed or incorrect at the later date or during finalization of the bid or the bidders withdraw their offer during the finalization of the bid, their offer shall be liable to be rejected and their company shall be debarred from executing any business with MPUVN for a period of 3 years and their EMD shall be forfeited.
- A.6** Validity of the offer (rates) shall be valid up to March 31, 2010.
- A.7** Before submission of the Offer, Bidders are required to make themselves fully conversant with the scope of the work, technical requirements and specifications, etc., so that no ambiguity arises on a later date in this respect. The price quoted shall remain constant during the contract period.
- A.8** The Offer must contain the name, address of residence and places of business of the person or persons submitting the Offers and should be signed with seal by the Bidder(s) with his/their usual signature(s).
- A.9** If the Bidder finds discrepancies in, or omissions from the tender documents or if he is in doubt as to their meaning, he should at once intimate contact person of MPUVN and obtain clarification in writing prior to submitting his Offer.
- A.10** Any approach from the Bidder, his representative or his agent to influence the decision on the Offer, officially or otherwise, shall render the Offer liable to be summarily rejected.
- A.11** Offer should be submitted in three separate sealed envelopes as mentioned below:
- A.11.1** First sealed envelope (part I) should contain Requisite Earnest Money Deposit (EMD) and proof of cost of tender document (cash in MPUVN or Demand Draft drawn in the name of "MPUVN Ltd; Bhopal", payable at Bhopal). The envelope should be super scribed as "EMD and Cost of tender document"
- A.11.2** Second sealed envelope (Part II) should contain original document

duly signed and sealed on every page, details of experience & infrastructure facilities, documents in support of Bid Evaluation Criteria, any other documents/ papers in support of claims made by the bidder should be super scribed as "MPUVN ECAP Bid - Part II - Technical Bid". All the papers of Offer documents except price offer, duly signed should be submitted in the (Part II) second envelope.

**A.11.3** Third sealed envelope (Part III) should contain price offer only. The Bidders should submit Financial Bid duly signed, on the original price schedule supplied with this Bid Document. It should be super scribed as "MPUVN ECAP-09 Bid - Part III - Financial Bid". Anything in regard of financial conditions, payments terms, rebate etc. mentioned in price offer shall make the Offer invalid. Therefore, it is in the interest of the Bidder not to write anything extra in Part III except price. Bidders may further note that deviation in terms and condition etc. or conditional tender/ offers shall not be accepted.

**A.11.4** these envelops should be packed in a envelop super scribed with "Bid for Energy Conservation Action Plan, tender number and due date.

**A.12** The procedure of opening of the Offer shall be as under:

**A.12.1** First envelope (Part I) bearing super scribed as "EMD and cost of tender

document" shall be opened on the date and time as mentioned in the Tender Notice at MPUVN's office at Bhopal. In unforeseen circumstances, MPUVN may at its discretion change the date and time of opening of the "EMD and cost of tender document". Bidders can attend the opening of tender, if they so desire.

**A.12.2** Second envelope (Part II) bearing super scribed as "Technical Bid" shall be opened on the date and time as mentioned in the Tender Notice at MPUVN's office at Bhopal. In unforeseen circumstances, MPUVN may at its discretion change the date and time of opening of the "Technical Bid". Bidders can attend the opening of "Technical Bid", if they so desire.

**A.12.3** Third envelope (Part III) containing Financial Bid of only those Bidder shall be opened, whose Technical Bid consisting of Earnest Money Deposit

(EMD), terms & conditions and other supporting information as mentioned in the Bid Evaluation Criteria contained in first & second envelopes are found acceptable and those who are found qualified as per the Bid Evaluation Criteria of this Bid Document. The third envelop (Part III) i.e. Financial Bid of only those successful Bidders who's Technical Bids is accepted may be opened on the date in the afternoon.

**A.13** Erases and other changes shall be duly initiated by the person/persons signing the Bid.

- A.14** Each page of the Bid document should be signed & stamped by the Bidder as a token of acceptance to terms and conditions mentioned herein.
- A.15** Bids of only those firms or individuals, who are either themselves technically capable and sound for providing such services and who give satisfactory evidence of such experience shall only be considered.
- A.16** The Bidder shall declare the name of the employee of MPUVN and his relationship with him in case any employee of MPUVN is a relative of the Bidder.
- A.17** In the event, the successful Bidder fails to sign the agreement with MPUVN or accept the work order within specified time or fails to accept the order for any reason whatsoever, then the earnest money deposited by the Bidder shall be forfeited by MPUVN.
- A.18** MPUVN, at its discretion, may award the work to more than one party.
- A-19** Declaration Letter on official letter head of bidder stating the following shall be required before signing agreement; in case of successful bidder:

We are not involved in any major litigation that may have an impact of affecting or compromising the rendering of services as required under this contract

Failing which EMD of the bidder shall be forfeited.

## **5.0 GENERAL TERMS AND CONDITIONS**

- B-1** In this Bid document, unless the context otherwise requires:-  
MPUVN shall mean the Managing Director or his representative of MP Urja Vikas MPUVN Ltd; with Head Office at Urja Bhawan Shivaji Nagar, Bhopal - 462016, and shall include his successors and assignees. The Bidder shall mean the Consultants / organization/firm/ agency etc who's Bid shall be accepted by MPUVN.
- B-2** The Bidder shall be deemed to have carefully examined all the papers etc. attached in the contract. If he has any doubt as to the meaning of any portion of any condition, etc. he shall before signing the agreement submit the particulars thereof to contact person MPUVN in order that such doubts are removed.
- B-3** The assignment shall be completed within the agreed time period failing which penalty at the rate of 1% of total assignment value per week subject to maximum of 10 % of total assignment value shall be imposed. This excludes delay in the completion of the work due to unforeseen reasons beyond the control and without fault and negligence of the Bidder including (but not restricted to) act of God or public anomie action of Government in its sovereign capacity, floods, epidemics, strikes, lockouts, fires and accidents. In the event of any of the aforesaid contingencies MPUVN may be promptly kept informed by the Bidder by Fax/Telex/Telegram/email followed by confirmation in writing with documentary proof of commencement and cessation of Force Majeaur

circumstances. Under such circumstances reasonable extension of time shall be granted by MPUVN. Application for such extension must be made before the due date of completion of work as per agreement. MPUVN, at its discretion, may cancel the contract, if the work is not completed within time granted.

- B-4** The Bidder shall have to comply with all rules, regulations, laws and bylaws enforced by local and State Govt. and also the organization in whose premises the work has to be done.
- B-5** If any eligible bidder is found unable to complete the study/assignment works within the specified time period, MPUVN will be free to complete balance assignment/work from elsewhere without notice to bidder but at his (i.e. bidders) cost & risk. The assignment or any part thereof which the bidder has failed to complete or if not available, the best and nearest available substitute thereof, shall be arranged by the MPUVN. Any such loss or damage which the MPUVN may sustain due to such failure on the part of the bidder, recovery of such loss or damage shall be made from any sum payable to the bidder. If recovery is not possible from the bills and the bidder fails to pay the losses or damages within one month, the recovery shall be made under Madhya Pradesh Public Demand Recovery Act or any other law applicable under these circumstances. In such a case, the contract shall automatically stand cancelled.
- B-6** MPUVN shall have at all reasonable time access to the works being carried out by the Bidder under this contract. All the works shall be carried out by the Bidder to the satisfaction of MPUVN.
- B-7** Arbitration: That, in the event of any dispute or difference whatsoever arising under the contract placed by the MPUVN, the same shall be referred to arbitration which shall be as per the provisions of the Arbitration and Conciliation Act 1996 (26 of 1996) and the rules made there under. All the proceedings of arbitration will take place in Bhopal. The award in such arbitration shall be final and binding on all the concerned parties. In this case the arbitrator shall be Secretary, Energy Department, Govt. of Madhya Pradesh/ Managing Director, MP Urja Vikas MPUVN Ltd., Bhopal. Work under the agreement shall continue during the arbitration proceedings unless the MPUVN or the Arbitrator directs otherwise.
- B-8** Notices, Statements and other communications sent by MPUVN through registered post or telegram or telex or by email to the Bidder at his specified address shall be deemed to have been delivered to the Bidder.
- B-9** The Bidder shall not publish the information collected from the assignment and shall not take advantage through publicity of the work without written permission of MPUVN.
- B-10** The bidder / Consultant shall bear all costs associated with the preparation and submission of its tender, including cost of presentation for the purposes of clarification of the bid, if so desired by the Consultant. MPUVN will in no

case be responsible or liable for those costs, regardless of the conduct or outcome of the Tendering process.

- B-11** MPUVN and/or its officers, employees disclaim all liability from any loss or damage, whether foreseeable or not, suffered by any person acting on or refraining from acting because of any information including statements, information, forecasts, estimates or projections contained in this document or conduct ancillary to it whether or not the loss or damage arises in connection with any omission, negligence, default, lack of care or misrepresentation on the part of MPUVN and/or any of its officers, employees.

## **6.0 Specific Terms & Conditions**

- 1.0 The assignment is to be executed as per the defined Scope of Work given in ANNEXURE - IV.
- 2.0 The assignment must be completed within the stipulated time frame agreed with MPUVN. Delay in execution of the assigned work, without prior information and adequate justification for delay, would lead to forfeiture of the Earnest Money Deposit.

## **7.0 Payments Terms**

Rates should be firm & fixed, inclusive of service tax, all taxes and expenses etc. Payment will be made as per terms and conditions described below after receipt of four copies of report duly accepted by authorized officer of the MPUVN along-with the submission of the bills in triplicate. (Bills should clearly indicate the component of service tax in the billing amount & an undertaking that they have deposited or will deposit the service tax as per government norms)

- 90% of the contract value on the satisfactory completion of the work, subjected to the acceptance of the work (Report) by Program Head of MPUVN ltd.
- Remaining 10% of the contact value after 3 months.
- TDS etc. will be deducted at source as applicable.
- In case the Consultant fails to execute the work (study) as per the time frame given in the work order a penalty of 1% of the total contract Value per week or part thereof & subject to maximum up to 10% of the total contract Value.

- 8.0 If any dispute or difference arises, the decision of Managing Director, MPUVN Ltd; shall be final and binding on the consultant.
- 9.0 Jurisdiction: that, any dispute between the consultant & MPUVN Ltd; Bhopal shall be the subjected to Bhopal jurisdiction.
10. Preliminary scrutiny of the proposal will be made to determine Whether they are complete, whether required process fee has been furnished, whether the documents have been properly signed, and whether the bids are generally in order. Proposals not conforming to such preliminary requirements will be prima facie rejected. In order to make the scrutiny simple and fast it is advised to flag the documents as indicated in the check list.
- 11.0 The successful bidder shall not assign, sublet or transfer the contract or any part thereof to any party without the prior consent of the MPUVN. In the event of bidder contravening this condition, the MPUVN shall be entitled to place the contract elsewhere on the bidder's risk and cost and the consultant shall be liable for any loss or damage that the MPUVN may sustain due to the consequences arising out of such replacing of the contract.
- 12.0 No price escalation on account of any statutory increase in or fresh imposition of any type of taxes etc. levied in respect of services specified in the said acceptance of the tender, shall be considered/applicable.

## 9.0 BID EVALUATION CRITERIA

Bids are invited from Consultants/ organization/firm/ agency etc having adequate qualification for undertaking the **Implementation of "Action plant for Energy Management"** as per the scope of work defined herein and satisfying criterion as per the following Bid Evaluation Criteria. Bids of only those parties who are found qualifying following Bid Evaluation Criteria will be taken in to further consideration and prices of only those parties qualifying based of these criterion will be opened.

### COMMERCIAL

1. Proof of Tender cost of **Rs.1000/-** has to be attached to the Part I Technical Bid.
2. Earnest Money Deposit as specified in Table-A for individual tender, has to be submit in Part-I (Above payments can be made in the form of cash to finance section MPUVN or through DD drawn on any Nationalized Bank/ Scheduled Bank in favors of **MP Urja Vikas Nigam Ltd; payable at Bhopal.**)
3. Bidder must submit the relevant document showing the registration of the firm/company; PAN number; Service tax number, TIN number (if applicable) experience, resource personals etc. ('applied for status' will not be accepted)

### TECHNICAL

1. The bidder must have adequate experience for undertaking the assignment as per the scope of work. Details of these requirements must be declared in the Technical Bid - in Part II.
2. Details of experience in the field of Energy conservation/similar work done in last two years (copies of the orders and certificates from the user agencies can be asked for confirmation) should be submitted along-with the Technical Bid as per ANNEXURE - III of the Bid Document.
3. The party should have sufficient technically qualified and well-experienced manpower for undertaking the assignment as per the scope of work. Brief bio-data of the key personnel be enclosed with the Bids as per ANNEXURE-III of the documents

#### **GENERAL**

1. The party should not have any relatives working with MPUVN.
2. The bidder must agree to abide by the terms & conditions laid down in the Bid Document. Each page of the Bid Document must be duly sealed and signed by authorized signatory in token of acceptance of the same.
3. The bidder's declaration on official letter head stating that they are not black-listed by any Central / State Government / Public Sector Undertaking in India; duly signed by the authorized signatory with date & seal.

Bids not satisfying above mentioned criteria will be liable for rejection.

ANNEXURE-I  
Tender No.3 : (ECAP: B-3)

#### **10.0 DECLARATION**

(Strike off whichever is not applicable)

This is to declare that Mr./Mrs. \_\_\_\_\_  
employee of MPUVN Ltd. at \_\_\_\_\_ (place), is  
related to our \_\_\_\_\_(designation & name).

OR

This is to declare that none of the Proprietors/ Partners/ Directors are  
having any relatives employed or working with MP Urja Vikas Nigam Ltd  
Bhopal. at any of its offices or its parent Department.

Date: \_\_\_\_\_

Sign. & Stamp of the Bidder

**ANNEXURE-III**

**11.0 DETAILS OF EXPERIENCE & TECHNICAL MANPOWER FOR EXECUTION OF THE ASSIGNMENT**

**1. Table 1 : Details of Technical Manpower**

Sr.No.	Name & Designation	Qualification	Experience (years)	Field of Expertise

(Attach resume of each of the team member. Use separate sheet if required)

**2. Table II : Major work done in last two years**

Sr.No.	Particulars	Client	Amount	Duration of contract

(Use separate sheet, if required; minimum eligible turnover in last two years is Rs.2.0Lakhs )

**3. List of Major Clients (for reference)**

Sr.No.	Name of Client	Contact Person (by designation)	Contact Nos. (Tele/Fax No/email.)

(Use separate sheet, if required)

(Sign. & Seal of the Bidder)

**12. SCOPE OF THE WORK**

**The Consultant shall develop a Project Plan in collaboration with MPUVN, which shall describe how all the elements of project management work together to ensure that scope and schedule are being managed holistically. The Project Plan developed by the Consultant shall specify the schedule of various tasks, time frame, deliverables and deployment of resources.**

**The Broad Scope of the Study will be as per the following:**

Following activities are required to be done under this title -

1. Prepare a list of Designated Consumers with all relevant details as per form 1 (enclosed as annexure X)
2. Prepare a list of consumers having connected load of more than 1000 kW.
3. Prepare a list of Energy Managers/ Energy Auditors/ ESCOS/ DISCOMS/ Energy Audit Firms with industry specialization along with the details as per annexure Y
4. Collect information from Designated Consumers as per form 1 (enclosed as annexure X) for the financial year 2007-08 and 2008-09 as per the information received from designated consumers.
5. Evaluation of MTOE & demonstration of the same to every Designated Consumer.
6. Making necessary arrangement for formatting data linkage as per requirement.
7. Facilitate to the person concern for data entry.

If required, MPUVN may ask the bidder / consultant to make detailed presentation of their work before making payments.

AGREEMENT

This agreement made on this .... day of ....., 2009 at Bhopal between .....(here-in-after referred to as "Party No 1) and Madhya Pradesh Urja Vikas Nigam Ltd., (here-in-after called as "Party No.2"), on the following terms and conditions:-

1. That, the Party No.1" has agreed to execute the work of Energy conservation action plan as per terms and conditions of Tender No. MPUVN/ECAP-09/ ECAP: B-3 Dated: -- /--- /2009 issued by MPUVN Bhopal.
2. That, the "Party No.1" has agreed to execute the work Energy conservation action plan as per work order on the rates already accepted/agreed upon as mentioned in the annexed "Rate sheet".
3. That, the rates shown in the Rate Sheets of the tender are valid up to 31/03/2010.
4. That, other terms and conditions of the tender, which have been agreed upon and also the conditions contained in the correspondence made in this matter will also form part of the agreement.
5. Arbitration: That, in the event of any dispute or difference whatsoever arising under the contract / work order placed by the Party No. 2, the same shall be referred to Arbitration which shall be as per the provisions of the Indian Arbitration Act, 1940 and the rules made there under. All the proceedings of arbitration will take place in Bhopal. The award in such arbitration shall be final and binding on both the parties. In this case the arbitrator shall be secretary, Energy department, Govt. of Madhya Pradesh/ Managing Director, M.P. Urja Vikas Nigam Ltd., Bhopal
6. Jurisdiction: That, any dispute between the bidder and M. P. Urja Vikas Nigam Ltd., Bhopal shall be subjected to Bhopal jurisdiction.
7. That, this agreement executed between the parties who affix their signatures at Bhopal, in witness whereof the parties hereto have signed the agreement.

Party No.1

Name: .....

Designation: .....

Party No.2

Witnesses;

1.....  
2.....

M P Urja Vikas Nigam Ltd. Bhopal

ANNEXURE – II

Tender No. 1: of MPUVN/ECAP-09( **ECAP: B-3** )/

dated:

**13.0 Declaration**

**Declaration Letter on official letter head stating the following:**

- i. We are not involved in any major litigation that may have an impact of affecting or compromising the delivery of services as required under this contract
- ii. We are not black-listed by any Central / State Government / Public Sector Undertaking in India

Witness:

Consultant:

Signature

Signature

Name

Name

Address

Designation

Company

Date

Date

Seal and signature of the Bidder

ANNEXURE – V

Tender No.3 : (ECAP: B-3)

(MPUVN Tender no: -----  
-----)

1.0 Schedule of Rates

Name of the bidder \_\_\_\_\_  
\_\_\_\_\_

We hereby submit our offer for conducting.....(Name of work).....  
as per terms and conditions of the bid

S.No	Description	Rate (Lump-sum)	Amount*

Total amount (Rs.)			
Amount (in words)			

\* The rates mentioned above are inclusive of service tax, professional tax and any other taxes, duties as applicable at the time of payment for MP.

**Evaluation of the tender will be done on the basis of total value quoted by the bidder.**

### Sign & Stamp of the Bidder

Annexure- X

#### Form--1

Details of information regarding total energy consumer and specific energy consumption per unit of production  
(See rule 3)

1. Name of the Unit
2. The Sector\* to which unit falls (Refer Annex.1)
3. (a) Complete address of Unit's location (including Chief Executive's name & designation)with mobile,telephone,fax nos. & e-mail.  
(b) Year of Establishment
4. Registered Office address with telephone, fax nos. & e-mail
5. Name, designation, address, mobile, telephone, fax nos. & e-mail of energy Manager
6. Production and capacity utilization details.

Year	Main Product	Units (please specify)	Installed Capacity (a)	Actual Production (b)	% capacity Utilisation (b/a)x100
Current financial year					
Previous financial year					
			Current financial year	Previous financial year	

- 7.0 Energy Consumption and cost.
- 7.1 Electricity Consumption and cost
- (A) Purchase Electricity
- (i) Units(Million kwh/year)
  - (ii) Total Cost(Rs.Million/year)
  - (iii) Plant Connected Load(kw)
  - (iv) Contract demand(kVA) with utility
  - (v) Connected load(kw)
- (B) Own Generation
- (a)Through DG sets
- (i) Annual generation (Million kWh/year)
  - (ii) Total Cost(Rs.Million/Year)
  - (iii) Fuel used(HSD/LDO/LSHS/LSFO)
  - (iv) Gross calorific value(kCal/kg)
  - (v) Annual fuel consumption(tonne)
  - (vi) Total annual fuel cost(Rs.Million)
- (b)Through Steam turbine/generator
- (i) Annual generation(Million kWh/year)
  - (ii) Fuel used state which type of fuel was used  
(C=coal, B=biomass, E=electricity). If coal was used, state which grade i.e.  
C/I= imported or C/F=coal of grade F
- (c)Through Gas turbine
- (i) Annual generation (Million kwh/year)
  - (ii) Fuel used(state which type of fuel was used      NG,PNG,CNG, Naphtha)
  - (iii) Gross calorific value(kCal/SCM)
  - (iv) Annual fuel consumption
  - (v) Total annual fuel cost(Rs.Million)
- (C)Total generation of electricity (Million kWh/year)
- 7.1(B) { a(1)+b(1)+c(1)}
- (D)Electricity supplied to tge grid/others(specify)
- (Million kWh/year)
- (E)total Electricity consumed(Million kWh/year)
- 7.1 {A(i)+C-D}
- 7.2 Fuel consumption and % cost for process heating
- (A) Coal
- (i)Gross calorific value(kCal/kg)
  - (ii)Quantity purchased (tonne/year)
  - (iii)Quantity used for power generation(tonne/year)
  - (iv)Quantity used as raw material, if any(tonne/year)
  - (v)Quantity used for process heating(tonne/year)
  - (vi)Total coal cost for process(Rs.Million/year)
- (B) Lignite
- (i)Gross calorific value(kCal/kg)
  - (ii)Quantity purchased (tonne/year)

- (iii)Quantity used for power generation(tonne/year)
  - (iv)Quantity used as raw material, if any(tonne/year)
  - (v)Quantity used for process heating(tonne/year)
  - (vi)Total lignite cost for process(Rs.Million/year)
- (C) Biomass other purchased solid fuels(pl.specify)  
baggase, rice husk, etc.
- (i)Gross calorific value(kCal/kg)
  - (ii)Quantity purchased(tonne/year)
  - (iii)Quantity used for power generation(tonnes/year)
  - (iv)Quantity used as raw material, if any(tonne/year)
  - (v)Quantity used for process heating(tonne/year)
  - (vi)Total baggase cost for process(Rs.Million/year)
- 7.3 Liquid
- (A) Furnace Oil
- (i)Gross calorific value(kCal/kg)
  - (ii)Quantity purchased(kL/year)
  - (iii)Quantity used for power generation(kL/year)
  - (iv)Quantity used as raw material, if any(kL/year)
  - (v)Quantity used for process heating(kL/year)
  - (vi)Total baggase cost for process(Rs.Million/year)
- (B) Low Sulphur Heavy Stock(LSHS)
- (i)Gross calorific value(kCal/kg)
  - (ii)Quantity purchased(tonne/year)
  - (iii)Quantity used for power generation(tonnes/year)
  - (iv)Quantity used as raw material, if any(tonne/year)
  - (v)Quantity used for process heating(tonne/year)
  - (vi)Total LSHS cost for process(Rs.Million/year)
- (C) High Sulphur Heavy Stock(HSHS)
- (i)Gross calorific value(kCal/kg)
  - (ii)Quantity purchased(tonne/year)
  - (iii)Quantity used for power generation(tonnes/year)
  - (iv)Quantity used as raw material, if any(tonne/year)
  - (v)Quantity used for process heating(tonne/year)
  - (vi)Total HSHS cost for process(Rs.Million/year)
- (D) Diesel Oil
- (a)High Speed Diesel(HSD)
  - (i)Gross calorific value(kCal/kg)
  - (ii)Quantity purchased(tonne/year)
  - (iii)Quantity used for power generation(tonnes/year)
  - (iv)Quantity used as raw material, if any(tonne/year)
  - (v)Quantity used for process heating(tonne/year)
  - (vi)Total HSD cost for process(Rs.Million/year)
- (b)Light Diesel Oil (LDO)
  - (i)Gross calorific value(kCal/kg)
  - (ii)Quantity purchased(kL/year)
  - (iii)Quantity used for power generation(kL/year)
  - (iv)Quantity used as raw material, if any(KL/year)
  - (v)Quantity used for process heating(KL/year)

(vi) Total LDO Cost for process heating (Rs. Million/year)

7.4 Gas

(A) Compressed Natural Gas (CNG)

(i) Gross calorific value (kCal/SCM)

(ii) Quantity purchased (million SCM/year)

(iii) Quantity used for power generation (million SCM/year)

(iv) Quantity used as raw material, if any (million SCM/year)

(v) Quantity used for process heating (million SCM/year)

(vi) Total cost of natural gas for process heating (Rs. Million/year)

(B) Liquefied Petroleum Gas (LPG)

(i) Gross calorific value (kCal/SCM)

(ii) Quantity purchased (million SCM/year)

(iii) Quantity used for power generation (million SCM/year)

(iv) Quantity used as raw material, if any (million SCM/year)

(v) Quantity used for process heating (million SCM/year)

(vi) Total cost of LPG for process heating (Rs. Million/year)

(C) Gas generated as byproduct/waste in the plant and used as fuel

(i) Name

(ii) Gross calorific value (kCal/Kg)

(iii) Quantity used for process heating (tonne/year)

(iv) Total cost of solid waste for process heating (Rs. Million/year)

7.6 Solid Waste

Solid waste generated in the plant and used as fuel

(i) Name

(ii) Gross calorific value (kCal/Kg)

(iii) Quantity used for process heating (tonne/year)

(iv) Total cost of solid waste for process heating (Rs. Million/year)

7.7 Others

(i) Name

(ii) Average gross calorific value (kCal/kg)

(iii) Quantity used for power generation (tonnes/year)

(iv) Quantity used for process heat (tonnes/year)

(v) Annual cost of the others source

Annexure 1- Name of Sectors

HSD	High Speed Diesel
LDO	Light Diesel Oil
LSHS	Low Sulphur Heavy Stock
LSFO	Low Sulphur Furnace Oil
C	Coal
B	Biomass
E	Electricity
C/I	Coal Imported
C/F	Indian Coal grade F
NG	Natural Gas
PNG	Piped Natural Gas
CNG	Compressed Natural Gas
FO	Furnace Oil
LPG	Liquefied Petroleum Gas
SCM	Standard Cubic Metre (15 C and 1.01325 bar)

KL            Kilo Litre  
Million      Ten(10) lakh

**Annexure -Y**

Proforma for Listing of Stakeholders (Energy Auditors/ Energy Managers / ESCOs/ DISCOMS / Energy Audit firms) with specialization along with other details

S.No	Name and Address of the Stakeholders	Contact person	Contact details Tel/cell/email	Affiliation (if any)	Field of specialization	Remark