

**STATE LEVEL ENERGY CONSERVATION AWARD**  
**(CATEGORY - ENERGY INTENSIVE INDUSTRY-Thermal Power Stations)**



**“Award Questionnaire”**

1	Name of the Thermal Power Station			
2	Type of Thermal Power Station (Please tick appropriate box)	<input type="checkbox"/> Coal/ <input type="checkbox"/> Lignite / <input type="checkbox"/> Liquid Fuel/ <input type="checkbox"/> Mixed Fuel <input type="checkbox"/> Gas/ <input type="checkbox"/> Biomass Fuel Fired/ <input type="checkbox"/> Diesel <input type="checkbox"/> Combined Cycle Gas Turbines (CCGT) <input type="checkbox"/> Open Cycle Gas Turbine (OCGT) <input type="checkbox"/> Cogeneration Plants <input type="checkbox"/> Diesel Generating Sets <input type="checkbox"/> Others (Please specify)		
3	Year of establishment			
4	Complete address of Unit's location (including Chief Executive's name & designation) with mobile, telephone, fax nos. & e-mail.			
5	Name, designation, address, mobile, telephone, fax nos. & e-mail of Certified Energy Manager appointed or designated under EC Act			
6 (a)	Energy consumption in metric ton of oil equivalent (MTOE) in last 3 years	2017-18	2018-19	2019-20
6(b)	Whether ISO 50001 Energy Management System Certified (Yes/No)? If yes, please attach a copy			
7	Frequency of Energy Audit (Once in a Year, Once in Two Years, Once in Three Years, Other Specify)			
8	Specific Energy Consumption (TOE/Ton of Production) or Heat Rate as per Form-1 submitted to BEE (Please attach copy of Form-1 duly verified by Accredited Energy Auditor)	2018-19	2019-20	
9	<b>Thermal Power Station Design (Coal / Lignite / Liquid Fuel / Mixed Fuel / Gas/ Biomass Fuel / Diesel Fired) Details</b> <b>(TPS of above type to submit Station Design Details information in this table)</b>			
	<b>Particulars</b>	<b>Financial Year (Reference Year)</b>	<b>Financial Year</b>	<b>Financial Year</b>
	<b>Design details</b>	<b>2017 -18</b>	<b>2018-19</b>	<b>2019-20</b>
(a)	Capacity of the station (MW)			
(b)	Average Station Gross Heat Rate on GCV basis of the fuel used, (kcal/kWh)			
(c)	Station Net Heat Rate on GCV basis of the fuel used, (kcal/kWh)			
(d)	Station Auxiliary Power Consumption (%)			
(e)	Station Secondary Fuel Oil Consumption (ml/kWh)			

<b>10 Thermal Power Station Operating Details</b>				
<b>(All type of Thermal Power Stations to submit detailed Operating information in this table)</b>				
<b>10</b>	<b>Annual Operating Parameters</b>	<b>Financial Year</b>	<b>Financial Year</b>	<b>Financial Year</b>
		<b>(Reference)</b>		
		<b>2017 -18</b>	<b>2018-19</b>	<b>2019-20</b>
10 (a)	Overall Station Generation (Million kWh/year)			
10 (b)	Overall Station PLF (%)			
<b><u>Coal/ Lignite/ Biomass Consumption (Million Metric Tonne) (Please specify the name of Fuel used)</u></b>				
10 (c)	Overall Station fuel consumption (Coal/ Lignite/Biomass Consumption) (Million Metric Tonne/ year)			
	Average Gross Calorific Value (GCV)of fuel (kcal/kg)			
	Overall Thermal energy used in the station due to the use of above fuel (Billion kcal/ year)			
<b><u>Oil Consumption (kL)(mention FO/ LSHS/ RFO/ Naptha/HSHS/HSD/other liquid fuel as applicable)</u></b>				
10(d)	Overall Station Oil Consumption (kL/ year)			
	Average Gross Calorific Value (kcal/Litre or kcal/kg, please specify)			
	Overall Thermal energy used in the station due to the use of above fuel (Billion kcal/ year)			
<b><u>Gas Consumption at STP (Million Cubic Meter)</u></b>				
10 (e)	Overall Station Gas Consumption at STP (Million Cubic Meter)			
	Average Gross Calorific Value at STP (kcal/Cubic Meter)			
	Overall Thermal energy used in the station due to the use of above fuel (Billion kcal/ year)			
<b><u>Other fuels used (Please specify- Solid Waste/ Liquid Effluent/ Waste gas/ By product gas/ etc.) – Provide data</u></b>				
10 (f)	Overall Station Fuel Consumption (please specify units_____)			
	Average Gross Calorific Value (please specify units_____)			
	Overall Thermal energy used in the station due to the use of above fuel (Billion kcal/ year)			
10(g)	<b><u>Gross Heat Rate on GCV basis (kcal/ kWh)</u></b>			
	Overall Station Gross Heat Rate on GCV basis (kcal/ kWh)			
<b>* Note: Cogeneration Plants to mention Fuel Quantity used only for power generation</b>				

\* For computing fuel consumption for power generation following relation may be used

1. Fuel consumption for process= Steam quantity used for process x (Enthalphy of steam - Feed water temperature)/ Boiler efficiency x G.C.V of fuel (specify unit)

2. Fuel consumption for power generation = Total fuel consumption – fuel consumption for process (specify unit)

10	Annual Operating Parameters (continued)	Financial Year	Financial Year	Financial Year
		2017 -18	2018-19	2019-20
10 (h)	<b>Net Heat Rate on GCV basis (kcal/ kWh)</b>			
	Overall Station Net Heat Rate on GCV basis (kcal/ kWh)			
10 (i)	<b>Auxiliary Power Consumption of Gross Energy Generated (%)</b>			
	Overall Station Auxiliary Power Consumption (%)			
<b>11. Annual Energy savings achieved and investment made due to implementation of Energy Efficiency improvement measures</b>				
11	<b>**Annual Energy savings achieved and investment made due to implementation of</b>			
11(a)	Electrical Energy Savings (Million kWh/ year)			
11 (b)	Electrical Energy Savings (Lakh Rs/ year)			
11 (c)	Coal / Lignite Savings (Million Tonnes/ year)			
11 (d)	Oil Savings (KL/ year)			
11 (e)	Gas Savings (Million M <sup>3</sup> at STP/year)			
11 (f)	Other fuel savings (Please specify and also mention units)			
11 (g)	Total fuel savings (Million kCal/ year)			
11 (h)	<b>**Total fuel savings (Lakhs Rs/ year)</b>			
11 (i)	Total annual energy savings (Lakhs Rs/ year) 10(b) + 10(h)			
11 (j)	Investment made on energy conservation measures (Lakhs Rs/ year)			

Note: Annual energy savings to be worked out based on the difference in the energy consumption before implementation of the project and energy savings achieved after implementation of the project in the identified area/ equipment in the reference year. The overall energy savings of all the implemented projects to be mentioned in the appropriate column. The energy savings achieved to be only the first year annual savings and should not include the savings achieved due to implementation of the projects in the previous years.

I ..... solemnly declare that to the best of my knowledge the information given in the Award Questionnaire (State Level Energy Conservation Award) thereto is correct and complete

.....

Date

(Signature of the Chief Executive)

Place

Name and Designation of Chief Executive \_\_\_\_\_

Organization Seal.....

**DOCUMENTS ATTACHED:**

1. Copies of Certificate pertaining to statutory requirements such as safety and pollution control( as applicable) for the period 2019-20 are enclosed.
2. A brief write up of the Energy Conservation and Efficiency measure (not more than 3-4 pages) along with photographs depicting equipment / locations where energy efficiency activities have been undertaken and a CD containing the same is
3. Copy of one Electricity bill for each of the two years i.e. 2018-19 and 2019-20 are attached.