## <u>Uttar Pradesh State Energy Conservation Award 2018</u> <u>Check-lists</u>

Sr. No	Requirement of Supporting Documents	Yes	No	Remark
1	Is Award questionnaire proforma-I filled in all aspects?			
2	Is Award questionnaire proforma-II filled in all aspects ?			
3	Copy of Certificate of ISO 50001 is attached			
4	Write-UP as desired is attached			
5	Month wise summarised details for Electricity & Thermal Consumption is attached			
6	Copy of Certificate received from Supplier or any reputed test lab for Calorific Value of Fuel is attached			
7	Copy of electricity bill is attached			
8	List of officials working in the Energy Efficiency Cell attached			
9	Other Innovative measures implemented for reducing energy consumption is attached			
10	Have you registered on UPSDA website www.upsavesenergy.com & filled relevant details			
11	Whether details of Renewable Energy used ia attached (Solar PV System, Solar Thermal System, Bio Energy System etc.)			

Pradesh State Energy Conservation Award-2018) and in the enclosed	·				
Prepared By:	Approved By:				
(Signature) Name Designation Mobile No.	(Signature) Name Designation Mobile No.				
Organization Seal	Organization Seal				
Date:	Place:				

#### **Uttar Pradesh State Energy Conservation Award-2018**

(Thermal Power Stations)
"Award Questionnaire: Proforma-I"

Sector Name: Thermal Power Plant	Sector Code: TF

1	Name of the Thermal Power Station with complete postal address.	
2	Type of Thermal Power Station (Please mark ☑)	□ Coal / □ Gas/ □ Others (Please specify)
3	Chief Executive's name & designation with mobile, telephone, fax nos. & e-mail.	
4	Name, designation, address, mobile, telephone, fax nos. & e-mail of Certified Energy Manager appointed or designated under EC Act	
5	Energy consumption in metric ton of oil equivalent (MTOE) in the current financial year 2017 -18	
6	Whether IS0 50001 Energy Management System Certified (Yes/No)? If yes, please attach a copy	

Thermal Power Station Design (Coal/ Liquid Fuel/ Mixed Fuel/ Gas/ Biomass Fuel) Details (TPS of above type to submit Station Design Details information in this table)

		Particulars / Design details	Previous completed financial year 2016-17	Current completed financial year 2017 -18
	i	Capacity of the station (MW)		
7	ii	Average Station Gross Heat Rate on GCV basis of the fuel used, (kcal/kWh)		
	iii	Station Net Heat Rate on GCV basis of the fuel used, (kcal/ kWh)		
	iv	Station Auxiliary Power Consumption (%)		
	V	Station Secondary Fuel Oil Consumption (ml/kWh)		

			Annual Operating Parameters	Previous completed financial year 2016-17	Current completed financial year 2017 -18
		8.1	Overall Station Generation (Million kWh/year)		
		8.2	Overall Station PLF (%)		
		8.3.1	<u>Coal/ Biomass Consumption (Million Metric Tonne)</u> (Please specify the name of Fuel used)		
	8.3	8.3.2	Overall Station fuel consumption (Coal /Biomass Consumption) (Million Metric Tonne/ year)		
		8.3.3	Average Gross Calorific Value (GCV)of fuel (kcal/kg)		
		8.3.4	Overall Thermal energy used in the station due to the use of above fuel (Billion kcal/ year)		
	8.4	8.4.1	Oil Consumption (kL)(mention FO/ LSHS/ RFO/ Naptha/HSHS/HSD/other liquid fuel as applicable)		
8		8.4.2	Overall Station Oil Consumption (kL/ year)		
		8.4.3	Average Gross Calorific Value (kcal/Litre or kcal/kg, please specify)		
		8.4.4	Overall Thermal energy used in the station due to the use of above fuel (Billion kcal/ year)		
		8.5.1	Gas Consumption at STP/NTP (Million Cubic Meter)		
		8.5.2	Gas Pressure (Kg/CM <sup>2</sup> )		
	8.5	8.5.3	Overall Station Gas Consumption at Specified Pressure (Million Cubic Meter)		
		8.5.4	Average Gross Calorific Value at specified Gas Pressure (kcal/Cubic Meter)		
		8.5.5	Overall Station Gas Consumption at STP/NTP (Million Cubic Meter)		

	1	1	
	8.5	8.5.6	Average Gross Calorific Value at STP/NTP (kcal/Cubic Meter)
	6.5	8.5.7	Overall Thermal energy used in the station due to the use of above fuel (Billion kcal/ year)
	8.6	8.6.1	Other fuels used (Please specify- Solid Waste/ Liquid Effluent/ Waste gas/ By product gas/ etc.) – Provide data on similar lines of coal / oil / gas, as applicable.
		8.6.2	Overall Station fuel Consumption ( please specify units)
		8.6.3	Average Gross Calorific Value ( please specify units)
8		8.6.4	Overall Thermal energy used in the station due to the use of above fuel (Billion kcal/ year)
	8.7	8.7.1	Gross Heat Rate on GCV basis (kcal/ kWh)
		8.7.2	Overall Station Gross Heat Rate on GCV basis (kcal/ kWh)
	8.8	8.8.1	Net Heat Rate on GCV basis (kcal/ kWh)
		8.8.2	Overall Station Net Heat Rate on GCV basis (kcal/ kWh)
	8.9	8.9.1	Auxiliary Power Consumption of Gross Energy Generated (%)
		8.9.2	Overall Station Auxiliary Power Consumption (%)

Annual Energy savings achieved and investment made due to implementation of Energy Efficiency improvement measures

9	**Annual Energy sa	vings achieved and investment made due to implementation of Energy Efficiency improvement measures	· · · · · · · · · · · · · · · · · · ·	
	9.1	Electrical Energy Savings (Million kWh/ year)		
	9.2	Monetary Saving through Electrical Energy Savings (Lakh Rs/ year)		

	9.3	Coal Savings ( Million Tonnes/ year)					
	9.4	Oil Savings (KL/ year)					
	9.5	Gas Savings (Million M³ at STP/year)					
	9.6	Other fuel savings ( Please specify and also mention units)					
9	9.7	Total fuel savings (Million kCal/ year)					
	9.8	Total annual energy saving in MTOE					
	9.9	**Total Monetary Saving through fuel savings (Lakhs Rs/ year)					
	9.1	Total annual energy savings (Lakhs Rs/ year) Sr. no 9.2 + Sr. no. 9.9					
	9.11	Investment made on energy conservation measures (Lakhs Rs/ year)					
	Details of Innovative	energy conservation measures adopted ; if any					
10							
	Details of Renewable Energy used (Solar PV System, Solar Thermal System, Bio Energy System etc.); if any						
11							
	Have you registered on UPSDA website www.upsavesenergy.com & filled relevant details; if YES then please provide User ID along with details						
12							
implement appropriate	ation of the project in the	e worked out based on the difference in the energy consumption beforme identified area/ equipment in the reference year. The overall energolarings achieved to be only for the year 2016-17 & 2017-18 and shou	gy savings of all the implemented projects to be mentioned in the				
I, do hereby declare that the information given in the Award Questionnaire (Uttar Pradesh State Energy Conservation Award-2018) and in the enclosed documents is true to the best of my knowledge & belief and nothing has been concealed therein. I am well aware of the fact that if the information given by us is proved false / not true at any point of time, our application shall be rejected.							
<u>Prepared</u>	Prepared By: Approved By:						
(Signature	)		(Signature)				
Name	, 		Name				
Designation  Mobile No.	n		Designation Mobile No.				
Organizati Date:	on Seal		Organization Seal				

### Detailed Information of Energy Efficiency Projects UTTAR PRADESH STATE ENERGY CONSERVATION AWARD - 2018 " Award Questionnaire : Proforma-II "

		T						
	Name of the Establishment							
2	Please provide details in the following format on major energy 2017-2018 giving energy savings achieved.	gy efficiency improvement projects/ measure	es including in-house l	R&D efforts, technolo	ogy innovation, energy s	substitution and rene	ewable energy system	s commissioned during the
			Achievement of Annual energy savings in 2017-18					
			Electrical Energy		Thermal Energy			Investment incurred on the
		Energy Conservation Project description	(Lakh kWh)	FO/HSD (KL)	Gas (lakhs Nm³)	Total Thermal Energy (M kCal)	Total savings (Rs. Lakhs)	project (Rs. Lakhs)
		(i) Please list of Energy Efficiency the projects title names which were implemented during the year2017-18 (ii) Please mention the achievement of energy saving against each projects in the suitable columns.						
Energy Conservation projects								
	•	Delete or add Thermal Energy as the case	may be					
	I, do hereby de of my knowledge & belief and nothing has been concealed therein	eclare that the information given in the Award Qu . I am well aware of the fact that if the informatio					ents is true to the best	
	Prepared By:			Approved By:				
	(Signature)			(Signature)				
	Name							
	Designation							
	Organization Seal							
	Date: DOCUMENTS ATTACHED:  ** Mandatory Supporting documents			Place:				

- 1. For Electricity & Thermal Consumption: Month wise summarised details to be attached
- 2. Copy of ISO 50001 Certificate.
- 3. Copy of Certificate received from Supplier or any reputed test lab for Calorific Value of Fuel is attached
- 4. Relevant documents (other then above mentioned documents; if any )  $\,$  needs to submit.
- 5. Short falling of any documents create the causes of disqualification from award 2018.
- 6. Details given in Proforma-I (under section Achievement of energy savings from implementation of new Energy Efficiency Projects.) should be same in proforma-II.

# UTTAR PRADESH STATE ENERGY CONSERVATION AWARD - 2018 "Write-up"

Dear Participants,

We request you to submit us the following as additional information:

A brief write-up of the unit / establishment in MS Word (not in PDF) in a pen drive/ CD containing the soft copy of the same. The write up can also be sent on <a href="mailto:upseca.upsda@gmail.com">upseca.upsda@gmail.com</a>. The write-up to contain the information on Unit Profile, Energy Consumption year wise and Energy Conservation Achievements (highlighting the projects implemented during the year 2017-18), Environment and Safety. Please include the specific mention of other Innovative measures implemented for reducing energy consumption. Please also Include Energy management policy declared by the top management of your organization.

#### **Evaluation Strategy**

### **Evaluation methodology**

Sr. No	Evaluation Criterion	Max.100 Marks		
1	Station Gross Heat Rate Improvement (% improvement in Station Gross Hear Rate during 2017-18 over 2016-17)	30 marks		
2	% AUXILIARY CONSUMPTION REDUCTION [% reduction in Auxiliary Consumption over previous year (2016-17)]	15 marks		
3	Comparison of % deviation of Operating Station GHR from the Design GHR Parameters with the best reported deviation values among the participating TPS			
4	ISO 50001 Certification	10 marks		
5	Energy Efficiency Cell	10 marks		
	a)One number of Certified Energy Auditor(EA) / Energy Manager(EM)	5 marks		
	b)Two professional (including EM/EA)	7 marks		
	c)More than two professional (including EM/EA)	10 marks		
6	Use of Renewable Energy (Solar PV System, Solar Thermal System, Bio Energy System etc.)	20 marks		
I)	Solar PV System	10 marks		
	a) Solar PV System capacity in between 75% to 100% of Total connected load	10 marks		
	b) Solar PV System capacity in between 50% to 75% of Total connected load	08 marks		
	c) Solar PV System capacity in between 25% to 50% of Total connected load	05 marks		
	d) Solar PV System capacity less than 25% of Total connected load	02 marks		
II)	Solar Thermal System	05 marks		
III)	Bio Energy System	05 marks		
7	Registration ID on www.upsavesenergy.com & relevant details	05 marks		

**Note:** The above evaluation and weightage criterion is common for all the entities. However, in case of any peculiarity found in the application of above evaluation criteria, the Awards Committee reserves the right to modify the criteria, which shall be uniformly applied to all the entities