#### **GENERATION OF ELECTRICITY**

# FORMAT-1 PERIODICITY-ANNUAL DATA OF YEAR 20.....20.... Submission by 30th June

#### NAME AND ADDRESS OF UTILITY:

		Type of	' '			Gross	Electricity
SI. No.	Name of Power Station		Station as	at year end		Electricity	Consumption
		Prime- mover*	Nos. of Units	Unit Size	Stn. Capacity in MW	Generation in MkWh	in Unit & Stn. Auxiliaries in MkWh
(A)	Owned by the Utility						
1	Station-1						
2	Station-2						
3	Station-3						
4	Station-4						
(B)	Jointly Owned by the Utility (in respect of its share)						
1	Station-1						
2	Station-2						

<sup>\*</sup>Hydro turbine, Steam turbine (Coal), Steam turbine (Lignite), Steam turbine (Multifuel), Gas turbine, Diesel engine, Wind turbine, etc.

## Details of concern person for future communication/clarification

S.No.	Name of the officer	Design ation	Mobile No.	Email Address	Fax No.	Official Phone No.
1.						
2.						

Signature of Aurhorised Person

Seal

PERIODICITY- ANNUAL DATA OF YEAR: 20...20.... SUBMISSION-BY 30<sup>th</sup> JUNE

## TRANSMISSION OF ELECTRICITY

## Name & Address of State Transmission Utility/SEB/ED:

Figs. in MkWh

1.	Electrica	al Energy imported from :	
	(a)	Within the State/UT/System –	
		(i) State/Pvt/Jt. Power Stations	
		(ii) Captive Power Plants (CPPs)	
	(b)	Central Generating Stations (Station-wise)	
	(c)	Outside the State/UT/System	
		(i) Utilities – State/Pvt.(Name-wise) – Jt.(Name-wise)	
	(d)	Outside the country	
2.	Total E	lectrical Energy Imported (1a+1b+1c+1d)	
3.	Electrica	al Energy exported to:	
	(a)	Licensees within the State/UT/System: (furnish break-up licensee wise)	
	(b)	Other State Electricity Boards/Electricity Departments (Outside the State/System but within the country)-give breakup entity wise	`
	(c)	Outside the country	
	(d)	Any other entity within the State/UT/System- give break-up entity wise	
4.	Total ele	ectrical energy exported (3a+3b+3c+3d)	

PERIODICITY- ANNUAL DATA OF YEAR : 20...20... SUBMISSION-BY  $30^{TH}$  JUNE

## **DISTRIBUTION OF ELECTRICITY**

Figs. in MkWh

## Name & Address of the DISCOM/SEB/ED/Licensee:

1.	Electric	al Energy imported from :						
	(a)	Within the State/UT/System						
	(b)	Captive power plants( from within or outside the State/UT/System)						
	(c)	Central generating stations (Station-wise)						
	(d)	Outside the State/UT/System(from within the country)						
	(e)	Outside the country						
2.	Total E	lectrical Energy Imported (1a+1b+1c+1d+1e)						
3.	Electric	al Energy sold to:						
	(a)	Directly to consumers within the State/UT/System(Area of operation)						
	(b)	Licensees within the State/UT/system- furnish break-up licensee wise						
	(c)	Any other entity within the State/UT/System-furnish break-up entity wise						
4.	Total el	Total electrical energy sold (3a+3b+3c)						

PERIODICITY- ANNUAL DATA OF YEAR 20....20... SUBMISSION-BY  $30^{\text{TH}}$  JUNE

## TRADING OF ELECTRICITY

## Name & Address of the TRADING COMPANY Category of Licence:

Figs. in MkWh

1.	Electrica	al Energy purchased from:						
	(a)	State/Private./Joint Utility Power Stations (Station name-wise)						
	(b)	(b) Captive power plants (Name-wise)						
	(c)	Central Generating Stations (Name-wise)						
	(d)	Outside the country (Name-wise)						
2.	Total electrical energy purchased (1a+1b+1c+1d)							
3.	Electrica	al Energy sold to:						
	(a)	Licensees (Licensee name-wise)						
	(b)	Outside the country (Name-wise)						
	(c)	Any other entity (Entity name-wise)						
4.	Total ele	ectrical energy sold (3a+3b+3c+)						

Note: Please furnish break-up of each of above for round the clock, off peak, peak and as & when required trading.

Periodicity-Annual Data of year 20-- 20---Submission by -30<sup>th</sup>June

## DETAILS OF ACTUAL SALE AND PURCHASE OF GROSS ELECTRICAL ENERGY

Figures in MkWh

Name of Utility/Licensee:

Name of Utility/Non-Utility/Entity (To whom Sold /from whom purchased) SALES (MkWh)

PURCHASES (MkWh)

REMARKS, IF ANY

Note:-

- (i) Gross energy sale/purchase may be indicated utility/non-utility name-wise clearly & separately in this table.
- (ii) Purchase of energy from captive power plant if any, may also be indicated.
- (iii) Details of energy sold to licensees may be indicated Licensee-name wise.
- (iv) Wheeling of energy should not be included in the above data.
- (v) Energy imported/exported from /to Central Generating Stations may be given separately for each Power House.

## Name and address of the Utility:

## INSTALLED ELECTRICITY GENERATING CAPACITY

FORMAT-6 Periodicity-Annual Data of year 20--- Submission by—30<sup>th</sup> June

Figs. in MW

Sl. No. T	ype of <b>AS</b> .	AT THE BEGINNING	New	Change in	Capacity			
Prime	mover	OF THE YEAR	Capacity	capacity	Retired	AT THE EN	OF THE YEAR	<u> </u>
(Fue	el base) Installed	l Re-rated	added	during the	during the	Installed	Re-rated	Remarks
	Capacity	Capacity	(I.C)	year due to Re-ration*	year	Capacity	Capacity	if any

- 1. Hydro Turbine
- 2. Steam Turbine

Coal -

Lignite -

Gas/ Multifuel

- 3. Diesel Engine
- 4. Gas Turbine
- 5. Nuclear
- 6. Wind Turbine
- 7. Solar
- 8. Others, if any

## I.C = Installed Capacity

<sup>\*</sup> Use (+) if due to up ration or (-) if due to deration.

FORMAT-7 Periodicity-Annual Data of year 20---- 20---Submission by -30<sup>th</sup> June

#### **DETAILS OF ELECTRICITY GENERATING CAPACITY ADDED**

Name and address of the GENCO/Utility:

S1.	Name of Power	Unit size	Type of		MAKE		Date of
No.	House	in MW	Prime mover	Boiler	Turbine	Generator	Commissioning
			(Fuel base)				

Note: - The details of each unit are to be furnished in this format. Indicate primary fuel within brackets along with type of prime-mover.

FORMAT-8 Periodicity-Annual Data of year 20--- 20---Submission by- 30<sup>th</sup> June

## DETAILS OF ELECTRICITY GENERATING SETS RETIRED FROM SERVICE

## Name and address of the GENCO/Utility:

S1.	Name of the	Unit size	Type of	Date of	Date of	Reason(s) for
No.	Power House	in MW	Prime mover	Commissioning	Retirement	Retirement

FORMAT-9 Periodicity-Annual Data of year 20--- 20---Submission by 30<sup>th</sup> June

## **DETAILS OF DERATIONS OF ELECTRICITY GENERATING SETS**

## Name and address of the GENCO/Utility:

S1	Name of the	Unit No.	Date	Type of	Rated	Derated	Date	Reason(s)
No.	Power House		of	Prime mover	Capacity (I.C)	capacity	of	for
			Commissioning		(MW)	(MW)	Deration	Deration

I.C. = Installed Capacity

FORMAT-10 **Periodicity-Annual** Data of year 20--- 20--- dission by -30<sup>th</sup> June **Submission by** 

## **DETAILS OF FUEL CONSUMPTION**

## Name of the GENCO/Utility:

Sl	Name of	Fuel	<u>FUEL</u>	CONSUMED	Kilo calories	Overall
No.	Power House	Name	Qty. used	Average Calorific value in	per unit	Thermal
			mt /kl /	kilo calories per kg./litre	generated	Efficiency
			MMSCM			

Note: - - Fuel consumption details regarding Gas/Diesel stations are to be shown separately.

-Give details of all primary & secondary fuels consumed during the year.
-mt = Metric Tonne

= Kilo Litre -kl

-MMSCM = Million Metric Standard Cubic Metre

FORMAT-11
Periodicity-Annual
Data of vear 20--- 20--Submission by -30<sup>th</sup> June

# DETAILS OF STEP-UP TRANSFORMERS IN SERVICE AT THE POWER STATIONS AND VARIOUS SUB-STATIONS AS ON 31-03-20...

## Name of the Utility/Entity:

Sl No.	Name of Power House or	No. of Transformers	Voltage Class* in use	Voltage Ratio in use	Different Capacity in use (kVA)	No(s). in each capacity size	Aggregate capacity (kVA)
	Sub-station						

#### TOTAL

Note: - Power House/Sub-stations to be designated by the highest voltage that exists in the station.

Please ensure that only details of step-up transformers are indicated in this proforma.

Please indicate aggregate capacity along with total no. of transformers.

<sup>\*</sup> State if voltage class is 400 kV, 220 kV, 132 kV, 110 kV, 78 kV, 66 kV, 33 kV, 22 kV, 113.2 kV, 11 kV, 6.6 kV, 4.4 kV, 3.3 kV and other voltage if any.

FORMAT-12 Periodicity-Annual Data of year 20---Submission by 30<sup>th</sup> June

## **DETAILS OF STEP-DOWN TRANSFORMERS \* IN SERVICE AS ON 31-03-20....**

## Name of the Undertaking

S1	Voltage S T E F	D O	W N T R	A N S F	ORMERS	Aggregate
No.	Class Total No. of	Different	Different Capacities	No. in each	Total No. of Transformers	capacity
	Sub-stations	Voltage -	in use (kVA)	capacity-size		(kVA)
		ratio in use				
1.	400 kV					
2.	220 kV					
3.	132/110 kV					
4.	78/66 kV					
5.	44/33 kV					
6.	22 kV					
7.	13.2 kV					
8.	11 kV					
9.	6.6 kV					
10.	4.4 kV					
11.	3.3 kV					
12.	Any other (specify)					

**TOTAL** 

<sup>(\*)</sup> Secondary voltage above 500 volts.

FORMAT-13
Periodicity-Annual
Data of vear 20--- 20--Submission by -30<sup>th</sup> June

## **DETAILS OF DISTRIBUTION TRANSFORMERS \* IN SERVICE AS ON 31-03-20..**

Name of	the	<b>Utility</b>	Non-U	Jtility	Entity:

Sl	Voltage Class	Voltage Ratio	Total No.	Different capacities	No. in each	Aggregate
No.			of transformers	in use (kVA)	capacity size	capacity (kVA)

**Total:** 

<sup>\*</sup> Secondary voltage below 500 Volts.

Periodicity-Annual Data of year 20--- 20---

Submission by -30<sup>th</sup> June

## **DETAILS OF TRANSMISSION AND DISTRIBUTION LINES AS ON 31-03-20---**

Name and address of the Utility/Non-Utility/Entity:

Sl.	Nominal		h of line in k		Length of line added during the year				h of line in C	kt km	Remarks
No	Voltage	beginning of the year			in km at the beginning			at the end of the year			
		Single Ckt	Double Ckt	Multi Ckt*	Single Ckt	Double Ckt	Multi Ckt*	Single Ckt	Double Ckt	Multi Ckt*	
1.	EHV Lines: above 500kV										
2.	500 kV DC lines										
3.	400 kV										
4.	230 kV										
5.	220kV										
6.	132 kV										
7.	110 kV										
8.	78 kV										
9.	66 kV										
10.	33 kV										
11.	22 kV										
12.	11 kV										
13.	6.6 kV										
14.	4.4 kV										
15.	3.3 kV										
16.	2.2 kV										
17.	440/230 V, 3 phase, single phase if available										
18	* Direct current lines (volts)										
19	Any other (specify)										

. Note: Give break-up for U.G. (Underground) & O.H. (Overhead). Indicate voltage of operation. \* Mention no. of Ckts.

FORMAT-15 Periodicity-Annual Data of year 20--- 20---

**Submission by** -30<sup>th</sup> **June** 

## **DETAILS OF ELECTRICITY CONSUMERS, CONNECTED LOAD AND CONSUMPTION**

#### Name of the Utility

Sl. Consumer NUMBER OF CONSUMERS CONNECTED LOAD(kW)

Energy	Remarks							
No.	Category	At the beginning	Added during	At the end	At the beginning	Added during	At the end	Consumption
		of the year	the year	of the year	of the year	the year	of the year	(kWh)
		R U	R II	R II	R U	R II	R II	R II

- 1. Domestic
- 2. Commercial
- 3. Industrial
  - a. Low & Medium Voltage
  - b. High Voltage with demand less than 1 MW
  - c. HV/EHV with demand of 1MW & above
- 4.. Railways
- 5. Irrigation
- 6. Public Lighting
- 7. Public Water works &

Sewage disposal

- 8.. Any other
  - category
- 9. Pvt. Licensees\*

(Licensee wise)

10. Entities within State/U.T

(Entity wise)

11. Entities outside State/U.T

(Entity wise)

12. Total

Note: Energy consumed through unmetered connection should be estimated and indicated clearly.

\* Dealing in purchase and further sale of energy.

Give separate break-up for LT & HT supply for Item 7 to 11.

Give break-up for Rural (R) & Urban (U) areas separately

#### **DETAILS OF MANPOWER**

As on

31-03-20.(Yr.end)

FORMAT-16 (page 1 of 2)
Periodicity-Annual
Data of year 20--- 20--Submission by -30<sup>th</sup> June

## Name of Utility:

# Class of employment (A) Regular (i.e. monthly paid)

#### NUMBER OF EMPLOYEES

As on

31-03-20.(Yr.Start)

### Training provided

No. of Personnel/Tech/Adm/Others

Type of Training
Induction/Refresher/

Management/Others

- . Managerial and higher executives (Rank of Chief Engineer and above)
- 2. Technical & Scientific Officers
- 3. Non-technical: Executive, clerical, accounting, revenue collection, meter reading staff & officers, etc.
- 4. Technical Supervisory staff in
  - (a) Generation
  - (b) Transmission
  - (c) Distribution
  - (d) Trading
  - (e) Others
- 5. Technicians and Operating Staff in
  - (a) Generation
  - (b) Transmission
  - (c) Distribution
  - (d) Trading
  - (e) Others

#### TOTAL REGULAR (1) to (5) = (A)

#### (B) Non-Regular

- (a) Technical: Trainees & Apprentices
- (b) Work Charged Staff

#### (Monthly paid basis)

- i. Skilled
- ii. Unskilled

#### Total (b) = (i)+(ii)

#### (c) Casual (daily paid basis)

- i. Skilled
- ii. Unskilled

Total ( c ) = (i)+(ii) (i.e.=c)

Sub-Total (a)+(b)+(c) = (B)

**Grand Total (A)+(B)** 

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## General Guidelines for filling form for manpower in the electricity supply industry.

- 1. Managerial and higher executives: All engineering posts of the rank of Chief Engineer and above is to be included.
- 2. Technical and scientific officers: All engineering posts above the rank of supervisor/Junior Engineer/ Scientific Officer may be included.
- 3. Non-Technical: All regular non-technical employees i.e. Executive, clerical, accounting, revenue collection, meter reading staff and officers may be included.
- 4. Technical supervisory staff:
  - a) Generation: All technical staff of the rank of supervisor/Section officer/Junior engineer/ Assistant Controller engaged at generating stations and those associated with planning of generation may be included.
  - b) & c) Similar staff mentioned above engaged in transmission & distribution system.
  - d) & e) Similar staff mentioned above engaged in trading & other activities.
- 5. a) Technicians and operation staff: All the technical staff below the rank of supervisor/Junior engineer engaged at generating stations.
  - b) & c)Similar staff mentioned above engaged in Transmission and Distribution system.
- d) & e)Similar staff mentioned above engaged in other activities.

#### Training Facilities / Training Capacity in the Power Sector (Man-Days of Year)

Name of Utility/Organisation Format-17 Periodicity-Annual Submission by -30th June. Data of the Financial year 20--- 20---

Name of Institute	Field of Training (Thermal/Hydro/Transmission/ Distribution/ Management)		Induction Le	evel Training	(Man Days	)	Management Training (Man Days)		Total training (Man Days)	Total Training Capacity (Man Days)	Utilization of Training Capacity =Col. 10/11*100(%)
1	2	3	4	5	6	7	8	9	10	11	12
		Technical		Non-	Technical						
		Engineers	Sup./Operators	Technicians	Executive	Non-Executive					

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Periodicity-Annual
Data of year 20--- 20--Submission by -30<sup>th</sup> June

## **DETAILS OF THEFT OF ELECTRICITY**

Name and Address of Discom/Licensee/SEB/Electricity Deptt. =

- i) No. of cases where inspection was carried out:
- ii) No. of cases where theft of electricity was detected:
- iii) Estimated quantity of electrical energy considered as theft in above cases for the period:
- iv) Estimated cost of such energy:
- v) No. of cases where penalties were imposed:

FORMAT-19
Periodicity Annual
Data of year 20--- 20--Submission by -30<sup>th</sup> June .....

## STATISTICS ON ELECTRICAL ACCIDENTS

Name of Utility/Non-Utility/Entity:

Sl. . INSTALLATIONS

No.

H U M A N

FATAL

NON-FATAL

A N I M A L S

FATAL NON-FATAL

- 1. Installations of suppliers of electricity including SEBs/Licensees/Generating Companies:
  - (a) Generating Station
  - (b) Transmission System (Lines, sub-stations, towers, etc.)
  - (c) Distribution system (Lines, sub-stations, poles, transformers, etc.)
- 2. Installations of industrial consumers:
  - (a) Owned by Govt./Semi -Govt. bodies/local authorities.
  - (b) Owned by private companies
- 3. Installations of consumers other than industrial consumers e.g. domestic/agriculture/commercial consumers, etc.:
  - (a) Owned by Govt./Semi Govt. bodies/local authorities.
  - (b) Owned by private companies.
  - (c) Persons(s)

TOTAL (excluding suicides)

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Periodicity-Annual
Data of year 20--- 20--Submission by -30<sup>th</sup> June

## REASONS FOR ELECTRICAL ACCIDENTS

Name of	f Undertaking:					
Sl.	R EAS O N S	H U	M A N	A N I	M A L S	TOTAL
No.		FATAL	NON-FATAL	FATAL	NON-FATAL	
(i)	SNAPPING OF CONDUCTORS					
(ii)	ACCIDENTAL CONTACT WITH LIVE ELECTRIC WIRE / EQUIPMENT					
(iii)	VIOLATION / NEGLECT OF SAFETY MEASURES / LACK OF SUPERVISION					
(iv)	DEFECTIVE APPLIANCES/ APPARATUS / TOOLS					
(v)	INADEQUATE / LACK OF MAINTENANCE					
(vi)	UNAUTHORISED WORK					
(vii)	ANY OTHER REASONS					
	TOTAL					

N.B.: Main reasons for accidents mentioned at Sl.No.(vii) are: (Please specify)