# भारत सरकार केन्द्रीय विधुत प्राधिकरण (विधुत मंत्रालय)

सेवा भवन (उत्तरी खंड) कक्ष सं. 622, छठा तल, आर.के.पुरम, नई दिल्ली-110066

टेली. - 011-26732632, ई-मेल - <u>celegal-cea@gov.in</u> वेबसाइट - <u>www.cea.nic.in</u>

# सार्वजनिक नोटिस

विधुत अधिनियम, 2003 की धारा 177 के तहत प्रदत्त शक्तियों का प्रयोग करते हुए केन्द्रीय विधुत प्राधिकरण (के.वि.प्रा.) द्वारा केन्द्रीय विधुत प्राधिकरण (सांख्यिकी, विवरणी और सूचनाओं की प्रस्तुति) विनियम, 2007 को दिनांक 19.04.2007 को अधिसूचित किया गया था। उक्त विनियमों के विनियम 9 के उप-विनियम (2) के तहत प्रदत्त शक्तियों का प्रयोग करते हुए, अब उपरोक्त विनियमों के 21 प्रारूपों को जोड़ने का प्रस्ताव है। जोड़ने के लिए प्रस्तावित प्रारूप, के.वि.प्रा की वेबसाइट www.cea.nic.in पर उपलब्ध हैं। उक्त विनियमों में प्रस्तावित प्रारूपों का निरीक्षण 31 मई, 2022 तक 11:00 बजे से 16:00 बजे तक किसी भी कार्य दिवस को मुख्य अभियंता (विधि), के.वि.प्रा, कमरा नं. 622, सेवा भवन (उत्तरी खंड), छठा तल, आर.के.पुरम, नई दिल्ली-110066 के कार्यालय में भी किया जा सकता है।

2. सभी हितधारकों एवं जनता से अनुरोध है कि वे उक्त विनियमों में जोड़ने हेतु प्रस्तावित प्रारूपों पर अपनी टिप्पणी/सुझाव/आपित, ई-मेल (celegal-cea@gov.in) अथवा डाक के माध्यम से मुख्य अभियंता (विधि), के.वि.प्रा, कमरा नं. 622, सेवा भवन, (उत्तरी खंड), 6वां तल, आर.के.पुरम, नई दिल्ली-110066 को 31 मई, 2022 तक भेजने का अनुरोध किया जाता है।

(राकेश गोयल) सचिव, के.वि.प्रा.

#### GOVERNMENT OF INDIA CENTRAL ELECTRICITY AUTHORITY (MINISTRY OF POWER)

Sewa Bhawan (North Wing), Room No. 622, 6<sup>th</sup> Floor, R. K. Puram, New Delhi-110066 Tel. -011-26732632, email: celegal-cea@gov.in Website: www.cea.nic.in

#### **PUBLIC NOTICE**

In exercise of the powers conferred under section 177 of the Electricity Act, 2003, the Central Electricity Authority (CEA) had notified "Central Electricity Authority (Furnishing of Statistics, Returns and Information) Regulations, 2007" on 19.04.2007. In exercise of the powers conferred under sub-regulation (2) of regulation 9 of the said regulations, it is now proposed to add 21 nos. formats in the aforementioned regulations. The formats proposed for addition are available on website of CEA: <a href="www.cea.nic.in">www.cea.nic.in</a>. The proposed formats of the said regulations can also be inspected in the office of Chief Engineer (Legal), CEA, Sewa Bhawan (North Wing), Room No. 622, 6th Floor, R. K. Puram, New Delhi110066 on any working day till 31st May, 2022 between 1100 hrs to 1600 hrs.

2. All the Stakeholders and members of public are requested to send their comments/suggestions/objections on the proposed addition of formats in the said regulations through e-mail (celegal-cea@gov.in) or by post to Chief Engineer (Legal), CEA, Sewa Bhawan (North Wing), Room No. 622, 6<sup>th</sup> Floor, R. K. Puram, New Delhi-110066 latest by 31<sup>st</sup> May, 2022.

(Rakesh Goyal) Secretary, CEA

#### **Central Electricity Authority**

#### **NOTIFICATION**

New Delhi, the

,2022

F No	Whereas in ex	xercise of the pov	vers conferred und	er section 177,
read with Section 74 and cla	use (i) of Section 73	of the Electricity	Act, 2003, the Cer	ntral Electricity
Authority had notified the	Central Electricity	Authority (Furni	shing of Statistics	s, Returns and
Information) Regulations, 2	007 (hereinafter to b	e referred as the	"said regulations")	on 10 <sup>th</sup> April,
2007.				

And whereas the said regulations consist of 65 formats for furnishing of the statistics, returns or information by the licensees, generating companies, person(s) generating electricity for its or his own use and person(s) engaged in generation, transmission, distribution, trading and utilization of electricity to the Central Electricity Authority.

And whereas the sub-regulation (2) of regulation 9 of the said regulations inter-alia provide for the methodology for addition of formats for furnishing of the statistics, returns or information its time schedule and periodicity through the notification after inviting objections or suggestions persons likely to be affected thereby.

Now, therefore, in exercise of the powers conferred by sub-regulation (2) of regulation 9 of the said regulations, the Central Electricity Authority hereby proposed to add the following formats in the Central Electricity Authority (Furnishing of Statistics, Returns and Information) Regulations, 2007, namely: -

#### FORMAT 66 (sheet 1of 2)

PERIODICITY- Annually

SUBMISSION BY- 31st March \_\_\_\_\_

#### REPORT ON POWER PURCHASE AGREEMENT (PPA) BY INDEPENDENT POWER PRODUCERS (IPPs)

NAME OF THE GENERATING COMPANY/DEVELOPER: \_\_\_\_\_

Name of the	Name of the	Project Location	Year of	Type of Project	Installed	Contracted	Details of Power	Date of
Company		(State)	Commissioning					Commencement of
	(Unit-wise)			Renewable)	(in MW)	(in MW)	Agreement(PPA):Long	Supply
								(dd-mm-yy)
							Term(with whom)	
2	3	4	5	6	7	8	9	10
	Company	Company Project (Unit-wise)	Company Project (State) (Unit-wise)	Company Project (State) Commissioning (Unit-wise)	Company Project (State) Commissioning (Hydro/PS/ Thermal/ Renewable)	Company Project (Unit-wise) (State) Commissioning (Hydro/PS/Thermal/ Renewable) Capacity (in MW)	Company Project (Unit-wise) (State) Commissioning (Hydro/PS/Thermal/ Renewable) Capacity (in MW) Capacity (in MW)	Company Project (Unit-wise) (State) Commissioning (Hydro/PS/Thermal/ Renewable) (in MW) Capacity (in MW) Agreement(PPA):Long Term/Medium Term(with whom)

## FORMAT 66 (sheet 2 of 2)

PERIODICITY- Yearly

SUBMISSION BY- 31st March \_\_\_\_\_

## REPORT ON POWER PURCHASE AGREEMENT (PPA) BY INDEPENDENT POWER PRODUCERS (IPPs)

Date of End of Supply	Total Untied Capacity	Source of Fuel (for Coal based sanction-whether Pit-head	(Yes/No). If Yes,	Agreement type and	Basis of Pricing (MoU/Cost Plus/ Competitive Bidding)	Tariff for the duration of PPA (in a separate sheet), showing fixed charge and
(dd-mm-yy)	(in MW)	based or load center based)	duration			fuel charge separately
11	12	13	14		15	16

#### 1.01 SUBMISSION BY- 10:00 hours of next day

Name of Power Exchange:
Details of Area Clearing Prices (Rs/MWh) -Time block wise on daily basis for DAM/ RTM

Date	Hour	Time Block	A1	A2	E1	E2	N1	N2	N3	S1	S2	S3	W1	W2	W3	MCP
DD-MM-YYYY		00:00 - 00:15														
		00:15 - 00:30														
	1	00:30 - 00:45														
		00:45 - 01:00														
		01:00 - 01:15														
		01:15 - 01:30														
	2	01:30 - 01:45														
		01:45 - 02:00														
		22:00 - 22:15														
		22:15 - 22:30														
	23	22:30 - 22:45														
		22:45 - 23:00														
		23:00 - 23:15														
		23:15 - 23:30														
	24	23:30 - 23:45														
		23:45 - 24:00														

## Name of Power Exchange:

Details of electricity transacted in Power Exchanges- time block wise for DAM/ RTM.

Date	Hour	Time Block	Purchase Bid (MWh)	Sell Bid (MWh)	MCV (MWh)	Cleared Volume (MWh)	Congestion (MWh)	Volume Loss - Real Time Curtailment (MWh)	Final Scheduled Volume (MWh)	MCP (Rs/MWh)
DD-MM- YYYY		00:00 - 00:15								
1111		00:15 - 00:30								
	1	00:30 - 00:45								
		00:45 - 01:00								
		01:00 - 01:15								
		01:15 - 01:30								
	2	01:30 - 01:45								
		01:45 - 02:00								
		22:00 - 22:15								
		22:15 - 22:30								
	23	22:30 - 22:45								
		22:45 - 23:00								
		23:00 - 23:15								
		23:15 - 23:30								
	24	23:30 - 23:45								
		23:45 - 24:00								

Name of Power Exchange:
Details of electricity transacted in Power Exchanges for DAM/ RTM.

Date	Purchase Bid (MWh)	Sell Bid (MWh)	MCV (MWh)	Cleared Volume (MWh)	Congestion (MWh)	Volume Loss - Real Time Curtailment (MWh)	Final Scheduled Volume (MWh)	MCP (Rs/MWh)
01-MM-YYYY						(=-= + + ==)		
02-MM-YYYY								
03-MM-YYYY								
04-MM-YYYY								
05-MM-YYYY								
06-MM-YYYY								
07-MM-YYYY								
08-MM-YYYY								
09-MM-YYYY								
10-MM-YYYY								
11-MM-YYYY								
12-MM-YYYY								
13-MM-YYYY								
14-MM-YYYY								
15-MM-YYYY								
16-MM-YYYY								
17-MM-YYYY								
18-MM-YYYY								
19-MM-YYYY								
20-MM-YYYY								
21-MM-YYYY								
22-MM-YYYY								
23-MM-YYYY								
24-MM-YYYY								
25-MM-YYYY								
26-MM-YYYY								
27-MM-YYYY								
28-MM-YYYY								
29-MM-YYYY								
30-MM-YYYY								
31-MM-YYYY								
Total								
Minimum								
Maximum								
Average								

## Name of Power Exchange:

Term Ahead Market (TAM) / Green-TAM- Data for Intraday/ Daily/Anyday/ Day Ahead Contingency/ Weekly contracts. On Delivery Date Basis

Date	Cleared Volume for delivery date (MWh)	Real Time Curtailment (MWh)	Actual Scheduled Volume for delivery date (MWh)	MCP (for the delivered volume of electricity) (Rs/MWh)
01-MM-YYYY				
02-MM-YYYY				
03-MM-YYYY				
04-MM-YYYY				
05-MM-YYYY				
06-MM-YYYY				
07-MM-YYYY				
08-MM-YYYY				
09-MM-YYYY				
10-MM-YYYY				
11-MM-YYYY				
12-MM-YYYY				
13-MM-YYYY				
14-MM-YYYY				
15-MM-YYYY				
16-MM-YYYY				
17-MM-YYYY				
18-MM-YYYY				
19-MM-YYYY				
20-MM-YYYY				
21-MM-YYYY				
22-MM-YYYY				
23-MM-YYYY				
24-MM-YYYY				
25-MM-YYYY				
26-MM-YYYY				
27-MM-YYYY				
28-MM-YYYY				
29-MM-YYYY				
30-MM-YYYY				
31-MM-YYYY				
Total				
Minimum				
Maximum				
Average				

## Name of Power Exchange:

Term Ahead Market (TAM) / Green-TAM- Data for Intraday/ Daily/Anyday/ Day Ahead Contingency/ Weekly contracts.

On Trade Date Basis

Date	MCV for traded date (MWh)	Congestion for traded date (MWh)	Cleared Volume for traded date (MWh)	MCP (for the traded volume of electricity) (Rs/MWh)
01-MM-YYYY		` '	, ,	
02-MM-YYYY				
03-MM-YYYY				
04-MM-YYYY				
05-MM-YYYY				
06-MM-YYYY				
07-MM-YYYY				
08-MM-YYYY				
09-MM-YYYY				
10-MM-YYYY				
11-MM-YYYY				
12-MM-YYYY				
13-MM-YYYY				
14-MM-YYYY				
15-MM-YYYY				
16-MM-YYYY				
17-MM-YYYY				
18-MM-YYYY				
19-MM-YYYY				
20-MM-YYYY				
21-MM-YYYY				
22-MM-YYYY				
23-MM-YYYY				
24-MM-YYYY				
25-MM-YYYY				
26-MM-YYYY				
27-MM-YYYY				
28-MM-YYYY				
29-MM-YYYY				
30-MM-YYYY				
31-MM-YYYY				
Total				
Minimum				
Maximum				
Average				

FORMAT-72 PERIODICITY- ANNUALLY DATA OF YEAR: 20...- 20.... SUBMISSION-BY-15-MAY-YYYY

Name of Power Exchange:
Details of electricity transacted in Power Exchanges in DAM/ RTM

Month	Purchase Bid (MWh)	Sell Bid (MWh)	MCV (MWh)	Cleared Volume (MWh)	Congestion (MWh)	Volume Loss - Real Time Curtailment (MWh)	Final Scheduled Volume (MWh)	MCP (Rs/MWh)
APR-YYYY								
MAY- YYYY								
JUN- YYYY								
JUL- YYYY								
AUG- YYYY								
SEPT- YYYY								
OCT- YYYY								
NOV- YYYY								
DEC- YYYY								
JAN- YYYY								
FEB- YYYY								
MAR- YYYY								
Total								

YEAR: 20...- 20.... **SUBMISSION-BY-**15-MAY-YYYY

Name of Power Exchange: Intraday/ Daily-Anyday/ Day Ahead Contingency/ Weekly contract wise TAM and Green-TAM data.

#### On Trade date basis

Month	MCV for traded date (MU)	Congestion for traded date (MU)	Cleared Volume for traded date (MU)	MCP (for the traded volume of electricity) (Rs/kWh)
APR-YYYY				
MAY- YYYY				
JUN- YYYY				
JUL- YYYY				
AUG- YYYY				
SEPT- YYYY				
OCT- YYYY				
NOV- YYYY				
DEC- YYYY				
JAN- YYYY				
FEB- YYYY				
MAR- YYYY				
Total				

#### Name of Power Exchange:

Intraday/ Daily-Anyday/ Day Ahead Contingency/ Weekly contract wise TAM and Green-TAM data.

On Delivery date basis

Month	Cleared Volume for delivery date (MU)	Real Time Curtailment (MU)	Actual Scheduled Volume for delivery date (MU)	MCP (for the delivered volume of electricity) (Rs/kWh)
APR- YYYY				
MAY- YYYY				
JUN- YYYY				
JUL- YYYY				
AUG- YYYY				
SEPT- YYYY				
OCT- YYYY				
NOV- YYYY				
DEC- YYYY				
JAN- YYYY				
FEB- YYYY				
MAR- YYYY				
Total				

**Provider: National Load Despatch Centre (NLDC)** 

	BILATERAL TRANSACTION DATA										
		Bilateral Tr	ansaction Buy	Bilateral T	Banking transactions						
Entity Name	Region	Direct (MU) Through Tra (MU)		Direct (MU)	Through Trader (MU)	(MU)*					

st Banking energy quantum under bilateral transactions (MU) between the contracting parties to be shown here.

FORMAT-76
PERIODICITY- MONTHLY DATA OF
YEAR: 20...- 20.... SUBMISSION-BY05-MM-YYYY

**Provider: National Load Despatch Centre (NLDC)** 

	CROSS BORDER TRADE DETAILS											
Sl. No.	Name of the Country	Name of the Traders	Types of Contracts*	Total Export (MU)	Total Import (MU)	Tariff details (Rs/ kWh)						

<sup>\*</sup> MoU between Governments, any other instrumentalities, etc. through which the electricity transaction is taking place.

**Provider: National Load Despatch Centre (NLDC)** 

Details of entities purchasing and selling on Power Exchanges in DAM/TAM/GTAM/RTM markets.

	IE	CX	P	PXIL	Any other PX approved by CERC		
ENTITY	Purchase (MU)	Sell (MU)	Purchase (MU)	Sell (MU)	Purchase (MU)	Sell (MU)	

Name	of	the	<b>Electric</b>	itv F	Regul	atorv	Comn	aissi	on:
1 101111	O.		Licetie	- L	LUBUI	acory	COIIII		O11.

# DETAILS OF TARIFF ORDER AND TRUING UP ORDER BY THE ------ ELECTRICITY REGULATORY COMMISSION

Sl. No.	Name of the Distribution Licensees/Transmission Licensees/ generating companies, etc.	of the Tariff	of the Tariff	Date of application of the Truing up petition & Tariff year	issue of the	0 1

Note: The detail information as per format needs to be furnished by Appropriate Commission after issuance of any tariff order, truing up order or any major change.

**Provider: National Load Despatch Centre (NLDC)** 

Details of Deviation Settlement Mechanism (DSM) volume and Price.

Region	Entity/ Beneficiary	DSM Vo	olume (MU)	Average DSM rate* (Rs/ kWh)
		Import	Export	

<sup>\*</sup> Average Rate: Average of DSM rate for 96 time blocks

# **Provider: National Load Despatch Centre (NLDC)**

Details of despatch under Reserve Regulations Ancillary Services (RRAS)

Region	Entity	Ancillary Despatched Volume (MU)	Regulation UP Volume (MU)	Regulation Down Volume (MU)

# FORMAT-81 PERIODICITY- DAILY **SUBMISSION BY- 10:00 hours of next day**

**Provider: National Load Dispatch Centre (NLDC)** 

Details of Un-Requisitioned Surplus (URS) from the generations being scheduled by the RLDCs

Region	Entity/ Beneficiary	Quantum of URS (MW)	Quantum of URS energy (MU)	Tariff (Rs/kWh)

#### **Daily Renewable Energy Generation**

Installed Capacity (MW), Generation (MUs) and Curtailment (MUs) from Renewable Energy Sources (injected in to the GRID)

#### Date:

RLDC/SLDC/CPSU/Electricity Department/Project Developers:-

(A) Generation and Curtailment

S. No.	Name of the Plant (location / district/ State)	Name of the Develo per	Installe d Capacit y (MW)	Type [Wind(onshore/ offshore)/solar {(Ground Mounted- PV/Solar Thermal) /Rooftop/Floating }/ Small Hydro/ Biomass/Bagasse/ Others*(Waste to energy etc)	Gross Energ y Gener ation during the day (MUs)	Curtai Iment From (HH: MM)	Curta ilmen t To (HH: MM)	Dura tion Of Curt ailme nt (Hrs: Minu tes)	Cur tail me nt in M W	Curta ilmen t in MUs	Writte n Instru ction issued by concer ned author ities (Y/N)	Spe cific Rea son s for Cur tail me nt	Grid frequenc y at the time of Curtail ment	Instruction of curtailment in MW to individual generator or System wide % curtailment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)

Note: 1. The data in columns (3) to (5) are static data and need to be provided one time only for existing/ New Projects. Remaining columns to be filled on Daily Basis.

- 2. For Solar Power Plants, only AC Installed Capacity is to be filled.
- 3. In case of 'Other', the source may be specified.

# **Monthly Renewable Energy Generation**

Installed capacity (MW) and Generation (MUs) from Renewable Energy Sources (injected in to the GRID)

- 1. SLDC/CPSU/SNA/Electricity Department:
- 2. Month/Year:

Sl.No	Renewable Energy Sources	Month	Year	Installed Capacit	ty (MW) as on	last date of th	ne month	Generatio	n (MUs) o	during the	month
	Sources			Central Sector	State Sector	Private Sector	Total	Central Sector	State Sector	Private Sector	Total
1	Wind onshore	Jan	2021								
2	Wind offshore	Jan	2021								
3	Solar- Ground Mounted	Jan	2021								
(i)	PV	Jan	2021								
(ii)	Solar Thermal	Jan	2021								
4	Solar - Rooftop	Jan	2021								
5	<b>Solar -Floating</b>	Jan	2021								
6	Bio Mass	Jan	2021								
7	Bagasse	Jan	2021								

8	Small Hydro (upto 25 MW)	Jan	2021				
9	Others(Waste to energy etc) ( Source may be specified)	Jan	2021				
10	Grand Total	Jan	2021				

Note: It shall be required for the power plants to also enter data in the Web application created by CEA for Renewable Energy

The Data shall be furnished by  $10^{th}$  of every month at Email: ce-rpmcea@cea.nic.in/cerpmcea@gmail.com .

Sector will be based on ownership of the plants.

If there is any change in previous data, the same shall be communicated separately so that it can be accounted for in the respective month.

This is a generation report for the Plants located within physical boundaries of the States hence imported power shall not be included. The report of Generation from ISGS Plants is collected separately.

# **Details of Monthly Plant wise Renewable Energy Generation and Curtailment**

#### 1. SLDC/CPSU/SNA/Electricity Department:

#### 2. Month/Year:

S. No.	Mon th	Year	Name of the Plant	Name of the Devel oper	Locatio n/ district/ State	Installed Capacity (MW)	Type [Wind(onshore/o ffshore)/solar {(Ground Mounted- PV/Solar Thermal) /Rooftop/Floatin g}/ Small Hydro/ Biomass/Bagasse / Others*(Waste to energy etc)	Centra 1 Sector/ State Sector/ Privat e Sector	Generat ion (MUs)	Curtailm ent due to Grid Security	Curtailm ent due to Transmis sion element overload	others	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Jan	2021	Plant 1						_			_	_
2	Jan	2021	Plant 2		_							-	_
3	Jan	2021											
4	Jan	2021											
5	Jan	2021											

Note: 1. The data in columns no. (4) to (9) are static data and need to be provided one time only for existing/ New Projects. Remaining columns to be filled on Monthly Basis.

- 2. For Solar PV Power Plants, only AC Installed Capacity is to be filled.
- 3. In case of 'Other', the source may be specified.

# **Parameters of Renewable Energy Plants**

Date:-

**RE Developer:-**

# **Wind Power plants**

S. No.	Items	Units	Description
	Type of Windfarm (offshore / Onshore)		
	Turbine		
1	Name of the Manufacturer	-	
2	Date and Year of Manufacturing	-	
3	Model	-	
4	Capacity	MW	
5	Date of Commissioning (dd/mm/yyyy)	-	
6	Hub height	m	
7	Total height	m	
8	Revolution per minute (RPM) range	rpm	
9	Rated wind speed	m/sec	
10	Type of Turbine (with Gear/ Without Gear)	-	
11	Type of Turbine (Horizontal Axis/ Vertical Axis)	-	

	Performance Parameters		
12	Rated electrical power output at rated wind speed	MW	
13	Cut-in speed	m/sec	
14	Cut-out Speed	m/sec	
15	Survival speed (Maximum wind speed)	m/sec	
16	Ambient temperature for "out of operation"	$^{\circ}$	
17	Ambient temperature for "in operation"	$^{\circ}$	
18	Survival temperature	$^{\circ}$	
19	Low Voltage Ride Through (LVRT) setting	-	
20	High Voltage Ride Through (HVRT) setting	-	
21	Lightning strength	kA	
22	Noise level	dB	
	Rotor		
23	Hub type (Rigid/Pitching/Hinged/Teetering/Other)	-	
24	Rotor diameter	m	
25	Number of blades	-	
26	Area swept by blades	m <sup>2</sup>	
27	Rated rotational speed	rpm	
28	Rotational Direction (Clockwise/ Anticlockwise)	-	
29	Coning angle	Degree	

30	Tilting angle	Degree	
31	Design tip speed ratio	No.	
	Blades		
32	Length	m	
33	Diameter (of the blade cross-section)	m	
34	Material	-	
35	Twist angle	Degree	
	Generator		
36	Туре	-	
37	Number of poles	No.	
38	Generator speed	rpm	
39	Winding type	-	
40	Rated Voltage of generation	kV	
41	Rated frequency	Hz	
42	Stator current	A	
43	Rotor current	A	
44	Rated operating temperature	C	
45	Type of cooling (air cooled)/ liquid cooled)	-	
46	Power factor (in decimal up to two digits)	No.	
47	Generation Capacity @Rated Wind speed	MW	

48	Peak continuous generation capacity	MW	
49	Frequency Converter (Type –rotary/ solid state/other)	-	
50	Type of filter on generator side	-	
51	Type of filter on grid side	-	
	Transformer		
52	Transformer capacity	MVA	
53	Transformer cooling type (specify)	-	
54	Voltage (Primary/Secondary)	kV	
55	Winding configuration (specify)	-	
	Weight		
56	Rotor weight	kg	
57	Nacelle weight	kg	
58	Tower weight	kg	
59	Over speed Protection	-	
60	Design Life (years)	-	
61	Design Standard followed with year of publication	-	
62	Latitude(North/South)	degree	
63	Longitude(East/west)	degree	
64	Date of Commercial Operation (dd/mm/yyyy)	-	
65	Height of the location above mean sea level	m	

66	Gap/distance between two adjacent wind turbines (in	No.	
	terms of rotor diameters)		
67	Type of Communication system	-	
68	Type of VAR compensation device(SVC /STATCOM)	-	
69	Type of Storage device (if any)	-	

## **Solar Power Plants**

S. No.	Items	Units	Description
1.	Type of Solar Power Plant {(Ground mounted- PV/solar	-	
	thermal) /rooftop/ floating}/ small hydro/		
	biomass/bagasse/ others))		
2.	Latitude (North/South)	Degree	
3.	Longitude (East/West)	Degree	
4.	Elevation angle and orientation angle of arrays	Degree	
5.	Elevation angle and orientation angles of concentrators	Degree	
6.	The generation capacity of the generating facility (AC	MW	
	capacity)		
7.	Height of Location above mean sea level	m	
8.	Date of commercial operation (dd/mm/yyyy)	-	

9.	Rated voltage	kV
10.	Details of type of mounting: (tracking technology, if	-
	used, single axis or dual axis, auto or manual)	
11.	Manufacturer and Model (of Important Components,	-
	Such as Turbine, Concentrators, Inverter, Cable, PV	
	Module, Transformer, Cables)	
12.	DC installed Capacity	MW
13.	Module Cell Technology (crystalline Si/ thin films/bifacial, perovskite solar cells (PSCs)/other)	-
14.	I-V Characteristic of the module	-
15.	Inverter rating at different temperatures (including	kW
	ambient temperature)	
16.	Inverter Efficiency Curve and maximum efficiency	-
17.	Transformer capacity & rating (Voltage ratings – primary	MVA/
	and secondary, evacuation voltage, distance from	kV/km
	injection point	
18.	Type of Communication system	-
19.	Type of VAR compensation device(SVC /STATCOM)	-
20.	Type of Storage device (if any)	-

# **Status of Under Construction Renewable Energy Project**

Date:-SLDC/SNA/CPSU/Electricity Department/RE Developers:-

S. No	Name of the Proje ct	Install ed Capac ity (MW)	Loc atio n	Name of the Devel oper	Type (Wind/Sola r/others)	Date of letter of award	Tariff (Rs/k Wh)	Schedul ed Commis sioning date	Land Acqusit ion	Fina ncial closu re	Mat eria l Ord er Stat us	Plant Erecti on Status	LTA	/Connectiv	ity	Rem arks
													Substa tion	Transm ission Line	Sta tus	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)

# **Details of commissioned Renewable Energy Plants**

Date:-Month:-

SLDC/SNA/CPSU/Electricity Department/RE Developer:-

State:	•					
S. No.	Name of the Plant	Installed Capacity (MW)	Туре	Location (District)	State	Date of Commissioning
1						
2						
3						
	Total					

(Rakesh Goyal) Secretary, Central Electricity Authority

Note: The principal regulations were published in the Gazette of India, Extraordinary, Part III, Section 4, vide notification F.No. CEA/PLG/LF/9/40/07, dated the 19<sup>th</sup> April, 2007.