

Provided that, no depreciation shall be allowed to the extent of grant or capital subsidy received for the project.

(ii) Depreciation rate of 4.67% per annum shall be considered for the first 15 years and remaining depreciation shall be evenly spread during remaining Useful Life of the project.

(iii) Depreciation shall be computed from the first year of commercial operation: Provided that, for determination of project specific tariff, in case of commercial operation of the project for part of the year, depreciation shall be computed on pro rata basis."

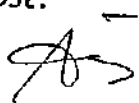
19. The reasons for considering the rate of depreciation as 4.67%, was provided in the Explanatory Memorandum issued by the Central Commission, as under:

4.5 DEPRECIATION

As per the existing provisions in the RE Tariff Regulations 2017, Depreciation is determined at depreciation rate of 5.28% per annum for first 13 years and remaining depreciation to be spread over the remaining useful life of the RE projects, as per straight line method and considering the salvage value of the project as 10% of project cost .

The depreciation is utilised to meet the debt repayment and hence the depreciation for first 70% of the Project may be spread over the loan tenure (15 years) and balance depreciation at the end of loan tenure can be spread over the remaining life of the Project.

Following the 'Differential Depreciation Approach over the loan tenure and beyond loan tenure over useful life computed on 'Straight Line Method', the Commission now proposes depreciation rate of 4.67% per annum for first 15 years and remaining depreciation to be spread during remaining useful life of the RE projects considering the salvage value of the project as 10% of project cost.

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20. The above submissions of PSPCL may be considered by this Hon'ble Commission while determining the levellized tariff.



PUNJAB STATE POWER CORPORATION LIMITED
SE/IPC
PSPCL, Patiala.

PLACE: PATIALA

DATE: 30-06-20

CUF of solar power plants of capacity 1 to 4 MW installed in Punjab since the year 2014 to 2017 as per power purchased by PSPCL during 2017-18

Sr. No.	Name of solar power Project	Installation year	Installed capacity (MW)	Offer to PSPCL (MW)	Energy exported (MU)	CUF during 2017-18	CUF during setting up year of the project
1	Abundant Energy, China Bidhi Chand Sur Singh	2015	2	2	2.62	14.95	15.26
2	Radiant, Pathrala, Bathinda	2016	3	3	4.06	15.45	15.61
3	Abundant Energy-II	2016	1	1	1.37	15.64	15.80
4	IK Energy, Lillian Kalan	2015	1	1	1.38	15.75	16.07
5	Azure Power-III (Punjaba Sikha wala)	2014	4	4	5.57	15.90	15.38
6	Nextgen Solux-II Jhunir Kalan	2016	1	1	1.4	15.98	16.14
7	Omega Infra. Chaurwala, Fatehgarh Sahib	2017	1	1	1.41	16.10	16.10
8	SAM SOLAR P. Ltd Nidampur, Sangrur	2017	2.5	2.5	3.55	16.21	16.21
9	Welspun Energy – IV Tiona	2015	4	4	5.77	16.47	16.80
10	Allianz Ecopower, Mirpur Kalan, Sardulgarh	2015	2	2	2.91	16.61	16.95
11	Oasis green, Bahadurpur, Budhlada	2016	3	3	4.42	16.82	16.99
12	Madhav Solar, Boha, Budlada	2014	2	2	2.98	17.01	17.53
13	Vivaan Solar P. Ltd. Bajak	2016	2	2	2.98	17.01	17.18
14	Astor Solar, Jhunir, Mansa	2016	1	1	1.49	17.01	17.18
15	Mokla Green Energy Pvt. Ltd. Boha	2015	4	4	5.96	17.01	17.35
16	Purshotam Ind. Bajak	2016	3	3	4.48	17.05	17.22
17	Magnificent Power, Jhunir	2016	1	1	1.53	17.47	17.64
18	JSSK Energy, Bhagsar	2015	1	1	1.54	17.58	17.94
19	Aditya Medi sales, Lalpur	2015	4	4	6.16	17.58	17.94
20	Atma powers Jakewali	2015	2	2	3.11	17.75	18.11
21	Nextgen Solux-I Mirpur Kalan	2015	1	1	1.56	17.81	18.17
22	Continental Eng & Power Ltd. Kotshmir	2016	1	1	1.55	17.69	17.87
23	Madhav Solar, Boha, Budlada	2014	2	2	3.15	17.98	18.53
24	Northstar Solar Power Pvt. Ltd., Pathrala	2015	4	4	6.26	17.87	18.23
25	Focal CAL Energy Nangla, Talwandi Sabo	2015	4	4	6.34	18.09	18.46
26	TR Energy, Jandwala Mirsangla, Fazilka	2015	2	2	3.26	18.61	18.99
27	TR Energy, Pathrala, Bathinda	2016	1	1	1.68	19.18	19.37
	Total capacity and Average CUF		69.6	69.5	88.49	16.98	17.26

CUF of solar power plants of capacity 1 to 4 MW installed in Punjab since the year 2014 to 2017 as per power purchased by PSPCL during 2018-19.

Sr. No.	Name of solar power Project	Year of Installation	Capacity (MW)	Offer to PSPCL (MW)	Energy Procured by PSPCL (MU)	CUF during 2018-19	CUF during setting up year of the project
1	Radient, Pathrala, Bathinda	2016	3	3	3.95	15.03	15.34
2	Abundant Energy-II	2016	1	1	1.34	15.30	15.61
3	Welspun Energy – IV Tiona	2015	4	4	5.43	15.50	15.97
4	SAM SOLAR P. Ltd Nidampur, Sangrur	2017	2.5	2.5	3.4	15.53	15.68
5	Azure Power-III (Punjaba Sikha wala)	2014	4	4	5.46	15.58	16.22
6	IK Energy, Lallian Kalan	2015	1	1	1.38	15.75	16.24
7	Omega Infra. Chaurwala, Fatehgarh Sahib	2017	1	1	1.38	15.75	15.91
8	Allianz Ecopower, Mirpur Kalan, Sardulgarh	2015	2	2	2.77	15.81	16.29
9	Oasis green, Bahadurpur, Budhlada	2016	3	3	4.18	15.91	16.23
10	Madhav Solar, Boha, Budlada	2014	2	2	2.81	16.04	16.70
11	Welspun Tiona	2016	2	2	2.85	16.27	16.80
12	Northstar Solar Power Pvt. Ltd., Pathrala	2015	4	4	5.83	16.64	17.15
13	Aditya Modi sales, Lalpur	2015	4	4	5.85	16.70	17.21
14	Madhav Solar, Boha, Budlada	2014	2	2	2.93	16.72	17.41
15	Purshotam Ind. Bajak	2016	3	3	4.41	16.78	17.12
16	Vivaan Solar P. Ltd. Bajak	2016	2	2	2.95	16.84	17.18
17	Mokia Green Energy Pvt. Ltd. Boha	2015	4	4	5.91	16.87	17.38
18	Alma powers lakewali	2015	2	2	2.96	16.89	17.41
19	Continental Eng & Power Ltd. Kotshmir	2016	1	1	1.51	17.24	17.59
20	Nextgen Solux-II Jhunir Kalan	2016	1	1	1.61	17.24	17.59
21	Focal CAL Energy Nangla, Talwandi Sabo	2015	4	4	6.05	17.27	17.79
22	Nextgen Solux-I Mirpur Kalan	2015	1	1	1.52	17.35	17.88
23	JSSK Energy, Bhagsar	2015	1	1	1.52	17.35	17.88
24	TR Energy, Jandwala Mirsangla, Fazilka	2015	2	2	3.07	17.52	18.06
25	Magnificent Power, Jhunir	2016	1	1	1.54	17.58	18.12
26	TR Energy, Pathrala, Bathinda	2016	1	1	1.56	17.81	18.17
27	Astor Solar, Jhunir, Mansa	2016	1	1	1.59	18.15	18.52
Total capacity and Average CUF			59.5	59.5	85.66	16.43	17.01

CUF of the projects, power purchase by PSPSCL during 2017-18 = 17.26%

UF of the projects, power purchase by PSPSCL during 2018-19 = 17.01%

Aggregate CUF = (17.26 + 17.01) / 2 = 17.14%

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**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

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Dated: 23rd June 2020

NOTIFICATION

No.: RA-14026(11)/4/2020-CERC: In exercise of powers conferred under Section 61 read with sub-clause (s) of Clause (2) of Section 178 of the Electricity Act, 2003 (36 of 2003), and all other powers enabling it in this behalf, and after previous publication, the Central Electricity Regulatory Commission hereby makes the following regulations:

1. Short title and commencement

- 1) These regulations may be called the Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020.
- 2) These regulations shall come into force on 1.7.2020, and unless reviewed earlier or extended by the Commission, shall remain in force up to 31.3.2023.

2. Definitions and Interpretation

- 1) In these regulations, unless the context otherwise requires,
 - a) 'Act' means the Electricity Act, 2003 (36 of 2003);
 - b) 'Auxiliary energy consumption' or 'AUX' in relation to a period in case of a generating station means the quantum of energy consumed by auxiliary equipment of the generating station, and transformer losses within the generating station, expressed as a percentage of the sum of gross energy generated at the generator terminals of all the units of the generating station;
 - c) 'Biomass' means wastes produced during agricultural and forestry operations (for example straws and stalks) or produced as a by-product of processing operations of agricultural produce (e.g., husks, shells, de-oiled cakes,); wood produced in dedicated energy plantations or recovered from wild bushes or weeds; and the wood waste produced in some industrial operations;

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- d) **'Biomass gasification'** means the process of incomplete combustion of biomass resulting in production of combustible gases consisting of a mixture of carbon monoxide (CO), hydrogen (H₂) and traces of methane (CH₄);
 - e) **'Biogas'** means a gas produced when organic matter like crop residues, sewage and manure breaks down (ferments) in an oxygen-free environment;
 - f) **'Capital cost'** means the capital cost of a project as referred to in Regulations 12, 24, 27, 31, 39, 46, 50, 56, 62, 70 and 73;
 - g) **'Commission'** means the Central Electricity Regulatory Commission referred to in sub-section (1) of section 76 of the Act;
 - h) **'Conduct of Business Regulations'** means the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 or any subsequent re-enactment thereof;
 - i) **'Control Period'** means the period during which the norms for determination of tariff specified in these regulations shall remain valid;
 - j) **'Floating solar project'** or **'FPV'** means a solar PV power project where the arrays of photovoltaic panels on a structure of the project float on top of a body of water, such as artificial basin or lake, with the help of floater, anchoring and mooring system;
 - k) **'Grid Code'** means the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 as amended from time to time or any subsequent re-enactment thereof;
 - l) **'Gross calorific value'** or **'GCV'** in relation to a fuel used in a generating station means the heat produced in kCal by complete combustion of one kilogram of solid fuel or one litre of liquid fuel or one standard cubic meter of gaseous fuel, as the case may be;
 - m) **'Gross station heat rate'** or **'Gross SHR'** means the heat energy input in kCal required to generate one kWh of electrical energy at generator terminals of a generating station;
 - n) **'Installed capacity'** or **'IC'** means the summation of the name plate capacities of all the units of the generating station or the capacity of the generating station (reckoned at the generator terminals). In case of Solar PV power projects and Floating solar projects, Installed capacity shall be sum of name plate capacities (Nominal AC power) of the inverters of the project;

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- o) **'Inter-connection point'** shall mean interface point of renewable energy generating facility with the transmission system or distribution system, where the energy is injected, as the case may be, and include:
- i. in relation to wind power projects, solar PV power projects, renewable hybrid energy projects and renewable energy with storage Projects, line isolator on outgoing feeder on HV side of the pooling sub-station; and
 - ii. in relation to small hydro projects, biomass gasifier based power projects, non-fossil fuel based co-generation projects and solar thermal power projects, line isolator on outgoing feeder on HV side of generator transformer.
- p) **'MNRE'** means the Ministry of New and Renewable Energy of the Government of India;
- q) **'Municipal solid waste'** or **'MSW'** means and includes commercial and residential wastes generated in a municipal or notified area in either solid or semi-solid form and excludes industrial hazardous wastes, but includes treated bio-medical wastes;
- r) **'Non-fossil fuel based co-generation project'** means a generating station that uses the process in which more than one form of energy (such as steam and electricity) are produced in a sequential manner by use of biomass;
- s) **'Operation and Maintenance expenses'** or **'O&M expenses'** means the expenditure incurred on operation and maintenance of the project, or part thereof, and includes the expenditure on manpower, repairs, spares, consumables, insurance and overheads;
- t) **'Project'** means a generating station or an evacuation system upto inter-connection point, as the case may be, and in case of a small hydro project includes all components of generating facility such as dam, intake water conductor system, power generating station and generating units of the scheme, as apportioned to power generation;
- u) **'Pumped storage hydro project'** means a hydro power project which generates power through water stored as potential energy, pumped from a lower elevation reservoir to a higher elevation reservoir;
- v) **'Refuse derived fuel'** or **'RDF'** means segregated combustible fraction of solid waste other than chlorinated plastics in the form of pellets or fluff produced by drying, de-stoning, shredding, dehydrating, and compacting combustible components of solid waste that can be used as fuel;

- w) **'Renewable energy'** or **'RE'** means the electricity generated from renewable energy sources;
- x) **'Renewable energy project'** means a generating station that produces electricity from renewable energy sources;
- y) **'Renewable energy source'** means renewable source of energy such as water, wind, sunlight, biomass, bagasse, municipal solid waste and other such sources as approved by the MNRE;
- z) **'Renewable energy with storage project'** means a combination of renewable energy project with storage or a combination of renewable hybrid energy project with storage at the same inter-connection point;
- aa) **'Renewable hybrid energy project'** means a renewable energy project that produces electricity from a combination of renewable energy sources, connected at the same inter-connection point;
- bb) **'Small hydro project'** means a hydro power project with a installed capacity up to and including 25 MW or as defined by the Government of India, from time to time at a single location;
- cc) **'Solar PV power project'** means a project that uses sunlight for direct conversion into electricity through photovoltaic technology and is based on technologies such as crystalline silicon or thin film or any other technology as approved by MNRE;
- dd) **'Solar thermal power project'** means a project that uses sunlight for direct conversion into electricity through concentrated solar power technology and is based on line focus or point focus principle;
- ee) **'State Nodal Agency'** means the agency in a State as may be designated by Ministry of New and Renewable Energy to promote efficient use of renewable energy in that State;
- ff) **"Storage"** means energy storage system utilizing methods and technologies like, solid state batteries, flow batteries, pumped storage, compressed air, fuel cells, hydrogen storage or any other technology, to store various forms of energy and to deliver the stored energy in the form of electricity;
- gg) **'Tariff period'** for renewable energy projects will be same as their Useful Life and tariff period shall be considered from the date of commercial operation of such power projects.
- hh) **'Useful Life'** in relation to project, including dedicated evacuation system, from the date of commercial operation of such project, shall mean the following: -

Central Electricity Regulatory Commission Renewable Energy Tariff Regulations, 2020

i. Wind power project	25 years
ii. Biomass power project with Rankine cycle technology	25 years
iii. Non-fossil fuel based co-generation project	25 years
iv. Small hydro Project	40 years
v. Municipal solid waste based power project/ Refuse derived fuel based power project	25 years
vi. Solar PV power project/ floating solar project/ Solar thermal power project	25 years
vii. Biomass gasifier based power project	25 years
viii. Biogas based power project	25 years
ix. Renewable hybrid energy project	Minimum of the Useful Life of different RE technologies combined for Renewable Hybrid Energy Project for Composite Tariff as specified under Regulation 72.
x. Renewable energy with storage project	Same as Useful Life of project assuming that there is no storage

ii) 'Year' means a financial year.

2) Save as aforesaid and unless repugnant to the context or if the subject matter otherwise requires, words and expressions used in these regulations and not defined, but defined in the Act, or the Grid Code or the Central Electricity Regulatory Commission (Terms and conditions of Tariff) Regulations, 2019 shall have the meanings assigned to them respectively in the Act or the Grid Code or the Central Electricity Regulatory Commission (Terms and conditions of Tariff) Regulations, 2019.

3. Scope and extent of application

These regulations shall apply to cases where tariff for a grid connected generating station or a unit thereof commissioned during the Control Period and based on renewable energy sources, is to be determined by the Commission under Section 62 read with Section 79 of the Act:



Provided that in cases of wind power projects, small hydro projects, biomass power project with Rankine cycle technology, non-fossil fuel based co-generation projects, solar PV power projects, floating solar projects, solar thermal power projects, renewable hybrid energy projects, renewable energy with storage projects, biomass gasifier based power projects, biogas based power projects, municipal solid waste based power projects and refuse derived fuel based power projects, these regulations shall apply subject to the fulfilment of eligibility criteria specified in Regulation 4 of these Regulations.

4. Eligibility Criteria

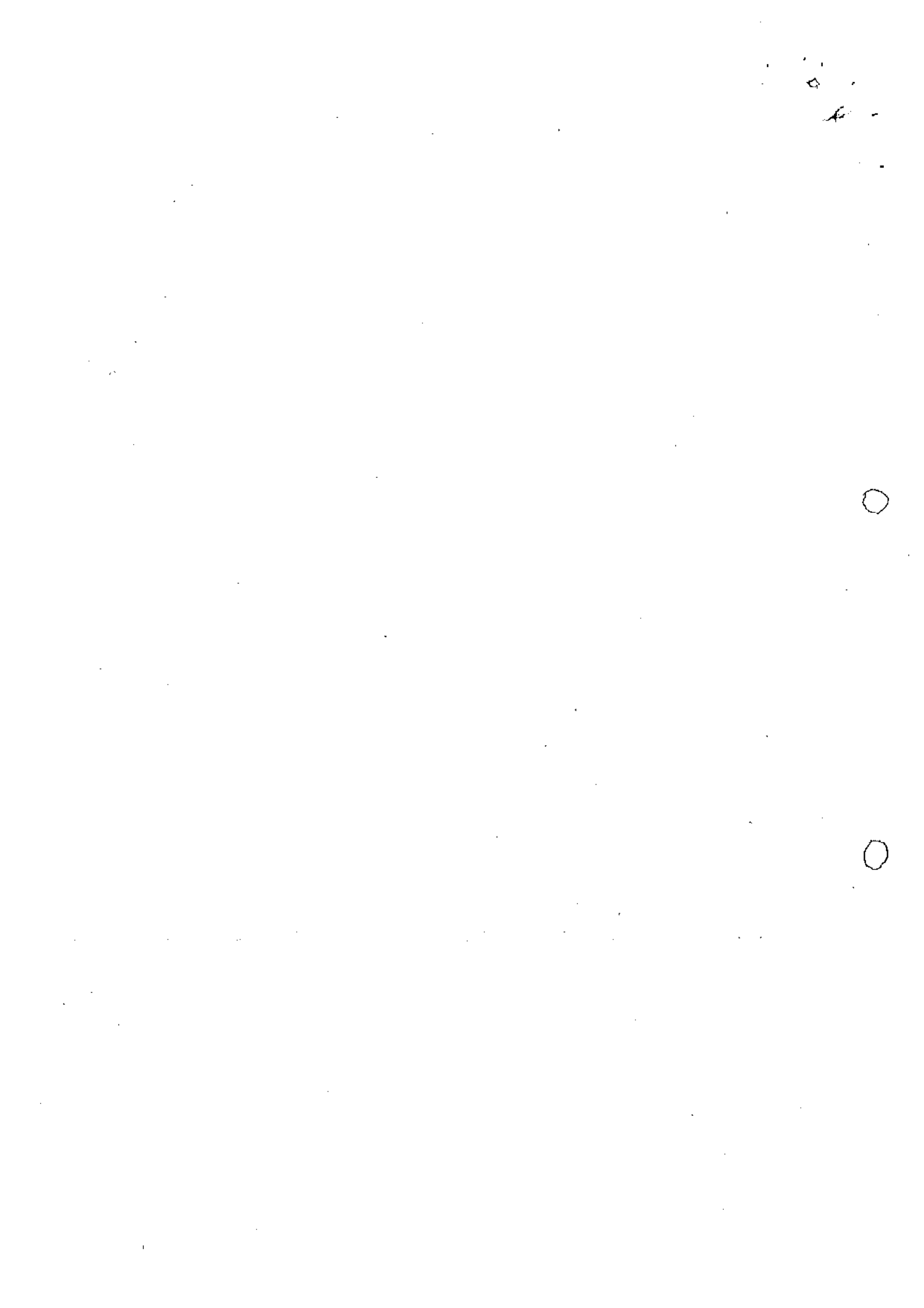
- a) Wind power project – The project that uses new wind turbine generators and is located at sites, on-shore or off-shore, approved by State Nodal Agency or Appropriate Government.
- b) Small hydro project – The project that uses new plant and machinery and is located at sites approved by State Nodal Agency or Appropriate Government.
- c) Biomass power project with Rankine cycle technology – The project that uses new plant and machinery, is based on Rankine cycle technology, and does not use any fossil fuel.
- d) Non-fossil fuel based co-generation project – The project that uses new plant and machinery, and is based on topping cycle mode of co-generation.

Topping cycle mode of co-generation – Any facility that uses non-fossil fuel input for the power generation and also utilizes the thermal energy generated for useful heat applications in other industrial activities simultaneously:

Provided that for the co-generation facility to qualify under topping cycle mode, the sum of useful power output and one half the useful thermal output be greater than 45% of the facility's energy consumption, during crushing season.

Explanation- For the purposes of this clause,

- (a) 'Useful power output' is the gross electrical output from the generator. There will be an auxiliary consumption in the cogeneration plant itself (e.g. the boiler feed pump and the FD/ID fans). In order to compute the net power output, it would be necessary to subtract the auxiliary consumption from the gross output. For simplicity of calculation, the useful power output is defined as the gross electricity (kWh) output from the generator.



- (b) **'Useful Thermal Output'** is the useful heat (steam) that is provided to the process by the cogeneration facility.
- (c) **'Energy Consumption'** of the facility is the useful energy input that is supplied by the fuel (normally bagasse or other such biomass).
- (d) **'Topping Cycle'** means a co-generation process in which thermal energy produces electricity followed by useful heat application.
- e) Solar PV power project, floating solar project and solar thermal power project – The project is based on technologies approved by MNRE.
Provided that floating solar project installed with existing renewable energy project other than ground mounted Solar PV project shall be treated as renewable hybrid energy project.
- f) Renewable hybrid energy project – The rated capacity of generation from one renewable energy source is at least 25% of the rated capacity of generation from other renewable energy source(s), which operate at the same point of interconnection:
Provided that energy is injected into grid at the same interconnection point and metering is done at such common interconnection point accordingly.
- g) Biomass gasifier based power project – The project uses new plant and machinery, and has a grid connected system that uses 100% producer gas engine, coupled with gasifier technologies approved by MNRE.
- h) Biogas based power project – The project uses new plant and machinery and has a grid connected system that uses 100% biogas fired engine, coupled with biogas technology for co-digesting agriculture residues, manure and other bio-waste as approved by MNRE.
- i) Municipal solid waste based power projects – The project uses new plant and machinery based on Rankine cycle technology, and uses municipal solid waste as fuel.
- j) Refuse derived fuel based power projects – The project uses new plant and machinery based on Rankine cycle technology, and uses refuse derived fuel as fuel.
- k) Renewable energy with storage project – The renewable energy project including renewable hybrid energy project that uses, partly or fully, renewable energy generated from such project to store energy into storage facility which is connected at the same point of interconnection as the renewable energy project.

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Chapter 1: General Principles

5. Control Period

The Control Period under these Regulations shall be from 1.7.2020 to 31.3.2023:

Provided that the tariff determined as per these regulations for the RE projects commissioned during the Control Period, shall remain valid for the tariff period;

Provided further that the tariff norms specified in these regulations shall continue to remain applicable until notification of the revised norms through subsequent re-enactment of these regulations.

6. Generic Tariff

The generic tariff shall be determined by the Commission on annual basis in accordance with these Regulations for the following types of renewable energy projects:

- a) Small hydro project;
- b) Biomass power project with Rankine cycle technology;
- c) Non-fossil fuel based co-generation project;
- d) Biomass gasifier based power project; and
- e) Biogas based power project

Provided that the generic tariff determined for the year, in which an RE project is commissioned, shall be applicable for such RE Project of same type and shall remain valid for the tariff period.

7. Project Specific tariff

- a) Project specific tariff, on case to case basis, shall be determined by the Commission for the following types of renewable energy projects:
 - i. Solar PV power projects, floating solar projects and solar thermal power projects;
 - ii. Wind power projects (both on-shore and off-shore);
 - iii. Biomass gasifier based power projects and biogas based power projects – if a project developer opts for project specific tariff;

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Central Electricity Regulatory Commission Renewable Energy Tariff Regulations, 2020

- iv. Municipal solid waste based power projects and refuse derived fuel based power projects;
- v. Renewable hybrid energy projects;
- vi. Renewable energy with storage projects; and
- vii. Any other project based on new renewable energy sources or technologies approved by MNRE.

b) Financial and operational norms specified in these regulations, except for capital cost shall be the ceiling norms while determining the project specific tariff.

8. Petition and proceedings for determination of tariff

(1) In case of renewable energy projects for which generic tariff has to be determined as per these regulations, the Commission shall determine such generic tariff at least one month before the commencement of year for each year of the Control Period:

Provided that for first year of Control Period i.e., from 1.7.2020 to 31.3.2021, the generic tariff shall be determined upon issuance of these regulations.

(2) A petition for determination of project specific tariff shall be accompanied by such fee as may be specified in the Central Electricity Regulatory Commission (Payment of Fees) Regulations, 2012 as amended from time to time or any subsequent re-enactment thereof, and shall be accompanied by:

- a) Information in forms 1.1, 1.2, 2.1, 2.2 and 2.3, as the case may be, as appended to these regulations;
- b) Detailed project report outlining technical and operational details, site specific aspects, basis for capital cost, detailed break-up of capital cost and financing plan;
- c) A statement of all applicable terms and conditions and anticipated expenditure for the period for which tariff is to be determined;
- d) A statement containing details of calculation of any grant or subsidy or incentive received, due or assumed to be due, from the Central Government or State Government or both. This statement shall also include the proposed tariff calculated without such subsidy or incentive;

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- e) Consent from beneficiary for procurement of power from renewable energy project at tariff approved by the Commission, in the form of initialled Power Purchase Agreement or Memorandum of Understanding; and
- f) Following documents in case of petition for determination of project specific tariff by renewable energy projects, where tariff from such renewable energy sources is generally determined through competitive bidding process in accordance with provisions of Section 63 of the Act:
 - i. Rationale for opting project specific tariff instead of competitive bidding; and
 - ii. Competitiveness of the proposed tariff vis-à-vis tariff discovered through competitive bidding/ tariff prevalent in the market.
- g) Any other information directed by the Commission.

(3) The proceedings for determination of tariff shall be in accordance with the provisions of the Conduct of Business Regulations.

9. Tariff Structure

The tariff for renewable energy sources shall consist of the following components:

- (a) Return on equity;
- (b) Interest on loan;
- (c) Depreciation;
- (d) Interest on working capital; and
- (e) Operation and Maintenance expenses;

Provided that for renewable energy projects having fuel cost component, like biomass power projects with rankine cycle technology, biomass gasifier based power projects, biogas based power projects, non-fossil fuel based co-generation projects and refuse derived fuel based power projects, single part tariff with two components, fixed cost component and fuel cost component, shall be determined.

10. Tariff Design

(1) The generic tariff shall be determined, on levelized basis, considering the year of commissioning of the project, for the tariff period of the project:

Provided that for renewable energy projects having single part tariff with two components, fixed cost component shall be determined on levelized basis considering

the year of commissioning of the project while fuel cost component shall be determined on year of operation basis in the Tariff Order to be issued by the Commission.

- (2) For the purpose of levelized tariff computation, discount factor equivalent to post-tax weighted average cost of capital shall be considered.
- (3) The above principles shall also apply for project specific tariff.

11. Treatment for Over-Generation

In case a renewable energy project, in a given year, generates energy in excess of the capacity utilization factor or plant load factor, as the case may be, specified under these Regulations, the renewable energy project may sell such excess energy to any entity, provided that the first right of refusal for such excess energy shall vest with the concerned beneficiary. In case the concerned beneficiary purchases the excess energy, the tariff for such excess energy shall be 75 percent of the tariff applicable for that year.

Chapter 2: Financial Principles

12. Capital Cost

Norms for capital cost, as specified in relevant chapters of these regulations, shall be inclusive of land cost, pre-development expenses, all capital work including plant & machinery, civil work, erection, commissioning, financing cost, interest during construction, and evacuation infrastructure up to inter-connection point.

13. Debt Equity Ratio

- (1) For determination of generic tariff and project specific tariff, the debt equity ratio shall be considered as 70:30:

Provided that, for project specific tariff, where the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan;

Provided further that for project specific tariff where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff;

Provided also that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment;

Provided also that debt equity ratio shall be considered after deducting the amount of grant or capital subsidy received for the project for arriving at the amount of debt and equity.

Explanation-The premium, if any, raised by the generating company, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the renewable energy project.

(2) The project developer shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the renewable energy project.

14. Loan Tenure and Interest on Loan

(1) Loan Tenure

For determination of generic tariff and project specific tariff, loan tenure of 15 years shall be considered.

(2) Interest on Loan

(a) The loans arrived at in the manner indicated in Regulation 13 shall be considered as gross normative loan for calculation for interest on loan. For project specific tariff, the normative loan outstanding as on 1st of April of every year shall be worked out by deducting the cumulative repayment up to 31st March of previous year from the gross normative loan.

(b) For the purpose of computation of tariff, normative interest rate of two hundred (200) basis points above the average State Bank of India Marginal Cost of Funds based Lending Rate (MCLR) (one-year tenor) prevalent during the last available six months shall be considered.