

RE monthly Updates

may, 2020

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Tenders

- About 649 MW of renewable tenders are issued in May 2020, including 623 MW of utility scale solar tenders, 23.5 MW of floating solar tenders and 1.57 MW of rooftop solar tenders.
- Auction is completed for SECI's RTC supply tender of 400 MW capacity.
- Due to Covid Lockdown, for about 22 GW tenders bid submission deadline is extended to June and July.

New RFS Issued

Tender Name	Technology	Capacity (MW)	Other details	Bid submission date
NTPC, Pan India, 600 MW, Solar EPC package with land May 2020	Solar EPC with land	600	Amount of bid security: INR 20 Mn- 50 MW INR 50 Mn- 60 – 110 MW INR 100 Mn- 120-220 MW INR 200 Mn- 230-300 MW	22-June-2020
BHEL, NTPC project in Kerala, 22 MW, Floating Solar, BOS, May 2020	Floating solar (BOS)	22	EMD: INR 2.03 million	5-June-2020
BHEL, Gujarat (Charanka Solar Park), 15 MW, O&M, May 2020	Solar (O&M)	15	EMD: INR 0.57 million PBG: 5% of the work order amount	3-June-2020
Cochin Port Trust, 1.5 MW, Floating solar, May 2020	Floating solar	1.5	EMD: INR 1.35 million PBG: INR 6.75 million	20-June-2020
New Town Kolkata Development Authority, Kolkata, 1 MW, Solar, May 2020	Solar	1	EMD: INR 1.8 million (Bid Security) PBG: 8% of work order amount	08-June-2020
UREDA, Uttarakhand, 575 kW, Solar rooftop, May 2020	Rooftop Solar	0.575	EMD: INR 0.5 million	05-June-2020
IOCL, Maharashtra, 400 kW, Solar rooftop, May 2020	Rooftop Solar	0.4	EMD: INR 0.21 million PBG: 10% of work order amount	18-May-2020
MEDA, Maharashtra, 272 kW, Solar rooftop, May 2020	Rooftop Solar	0.272	EMD: INR 0.36 million PBG: 15% of total project cost	26-May-2020
IOCL, Uttar Pradesh, 150 kW,	Rooftop Solar	0.15	EMD: INR 61,000	15-May-2020

[Solar rooftop, May 2020](#)

Source: JMK Research

Retendered/ Date extension

Tender Name	Technology	Other details	Bid submission date
SECI, 7,500 MW, Solar, Jammu & Kashmir, December 2018	Solar	EMD - INR 0.6 million / MW /MW/Project PBG: INR 2.4 million /MW/Project	Bid submission date extended till 31 July 2020
SECI, Pan India, 5000 MW, Thermal + RE, Mar 2020 (RTC-II)	Thermal + RE	EMD: INR 0.5 million/MW/Project PBG: INR 1.0 million /MW/Project	Bid submission date extended from 04 May 2020 to 03 July 2020
SECI, 2500 MW, ISTS, Solar UMREPP, Karnataka (ISTS X), April 2020	Solar	EMD: INR 0.4 million/MW PBG: INR 0.8 million /MW/Project	Bid submission date extended from 29 May 2020 to 29 June 2020
SECI, Pan India, 2000 MW, SPV Project, ISTS Tranche-IX, Mar 2020	Solar	EMD: INR 0.4 million/MW PBG: INR 0.8 million/MW	Bid submission date extended from 5 May 2020 to 11 June 2020
SECI, Pan India, 2000 MW, Wind, Tranche Tranche-IX, Mar 2020	Wind	EMD: INR 0.6 million/MW/Project PBG: INR 1.2 million /MW/Project	Bid submission date extended from 6 May 2020 to 9 June 2020
SECI, 1200 MW, Hybrid, ISTS, Tranche- III, Jan 2020	Hybrid	EMD: INR 0.5 million / MW PBG: INR 1 million /MW/Project	Bid submission date extended till 06 July 2020
NTPC, Rajasthan, 735 (3*245) MW, BOS, May 2020	Solar (BOS)	EMD: INR 50 million	Bid submission date extended from 19 May 2020 to 11 June 2020
GUVNL, Gujarat, 700 MW, Solar, Phase IX, March 2020	Solar	EMD: INR 0.4 million / MW PBG: INR 0.94 million	Bid submission date extended from 30 April 2020 to 31 July 2020
BREDA, Bihar, 250 MW, Solar, December 2019	Solar	EMD: INR 0.4 million /MW/Project	Bid submission date extended from 27 April 2020 to 16 June 2020
NVVN, Jharkhand, 50 MW, Solar PV Project, March 2020	Solar	EMD: INR 25 million	Bid submission date extended from 30 March 2020 to 04 June 2020

SECI, Telangana, 34 MW, SCCL Plant, Mar 2020	Solar	EMD: INR 30.872 million	Bid submission date extended from 13 May 2020 to 12 June 2020
SECI, Telangana, 32 MW, SCCL Plant, Mar 2020	Solar	EMD: INR 20.956 million	Bid submission date extended from 15 May 2020 to 15 June 2020
SECI, Telangana, 15 MW, Floating Solar, SCCL plant, Apr 2020	Floating Solar	EMD: INR 10.7 million	Bid submission date extended from 18 May 2020 to 17 June 2020
SECI, Leh & Cargil, 14 MW, Solar Power Plant with 42 MWH BESS, VGF, Jan 2020	Solar with BESS	EMD: INR 19.6 million	Bid submission date extended from 01 June 2020 to 30 June 2020
SECI, Diglipur, North Andaman, 4 MW, Floating solar project with 2 MW BESS, Jan 2020	Floating solar with BESS	EMD: INR 5.4 million PBG: INR 10.08 million	Bid submission date extended from 18 May 2020 to 15 June 2020
Power & Electricity Department, Mizoram, April 30, 2020	Sale of available surplus RE power (Non-solar) on short term basis (22 July to 31 Dec 2020)	EMD - INR 0.5 million / MW	Bid submission date extended from 21 May 2020 to 12 June 2020

Source: JMK Research

Result announced/ Bids submitted

Tender name	Status	Capacity tendered (MW)	Capacity allotted/ bid submitted (MW)	Bidders/ winners details
SECI, 400 MW, RE Power, RTC, New Delhi Municipal Corporation (NDMC), Dadra & Nagar Haveli	Project allotted	400	400	Renew Power- 400 MW INR 2.69/unit with (with escalation of 3% for 15 years, effective tariff- INR 3.60/ unit)
RRECL, 45 MW, Rooftop Solar, RESCO, Rajasthan, September 2019	Project allotted	45	38.9	Sunrays EPC Energies 1.5 MW, DSR International 1.5 MW, and Primus Energy 1.5 MW Details - Winners

Source: JMK Research



Projects Commissioned

No project update available for April and May 2020, due to Covid-19 lockdown.

Investments/ Deal

Date	Company name	Deal type	Sector	Acquirer/ Investor	Deal value	Stake Acquired
May 2020	Inox Wind (Sri Pavan Energy)	Equity	Wind	Sri KPR Infra & Projects	INR 5.1 lakh	51%

Source: JMK Research

[KKR, Actis eager to acquire 400 MW solar assets of Azure power](#)

Global Private Equity firms KKR, Actis, Edelweiss Infrastructure and Ayana Renewable Power are in talks with Azure power to acquire about 400 MW solar assets in Rajasthan. The projected cost of this deal would be fixed at INR 1600-1700 Crore or USD 225 million.

[Petronas in talks with Acme Solar to buy solar assets of about 100 MW capacity](#)

Malaysia's state-run Oil & Gas company, Petronas is in talks with Acme Solar to buy 100 MW solar assets located in Karnataka. Petroliaam Nasional Bhd (Petronas) will likely to conduct the deal worth INR 400 – 500 Crore through its Indian arm Amplus Energy Solutions.

[Brookfield in talks to acquire Piramal Enterprises' \\$300 million renewable loans](#)

Canada based Brookfield is in talks with Piramal Enterprises to buy USD 300 million of loans advanced to three renewable energy companies. Brookfield plans to build portfolio in India and consolidate their investments in renewable energy sector. Whereas, Piramal plans to sell the loans confronted due to financial pressure following Covid 19.

[Softbank-Bharti renewable JV looks to raise up to \\$750 million](#)

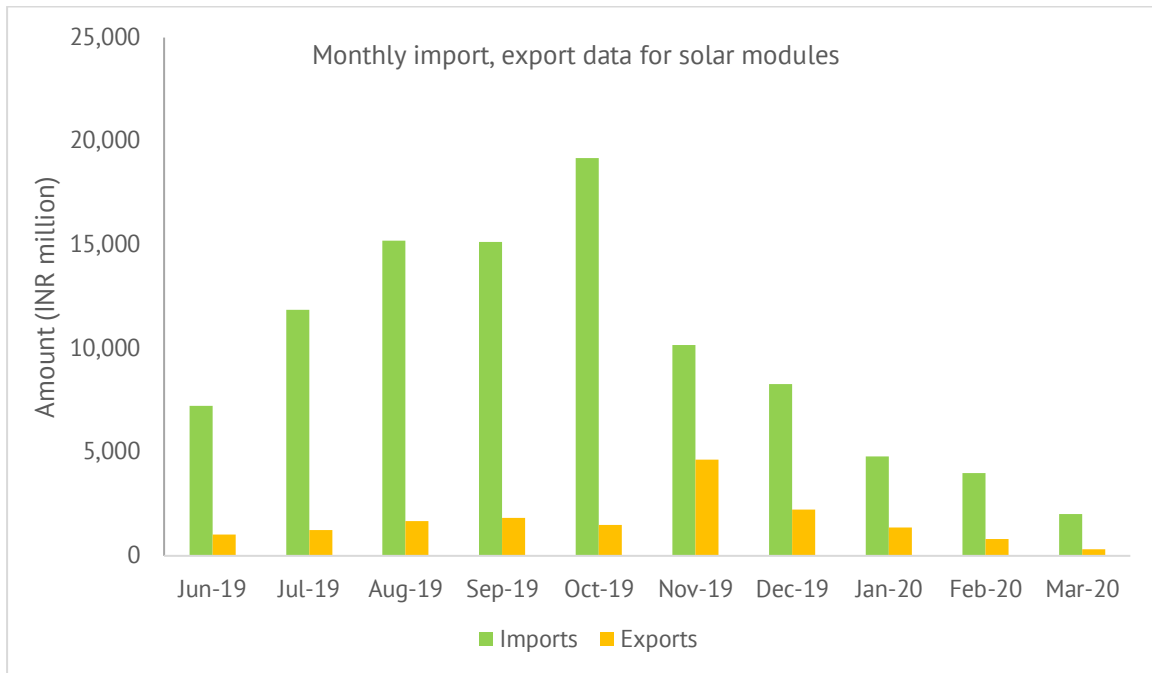
Softbank backed renewable energy firm SBG Cleantech is set to reach out to financial and strategic investors to raise capital to fund its ongoing and upcoming projects in India and US. For that SB Energy is exploring potential co-investment partnerships to accelerate growth of its leading renewable energy platform.

[NTPC to buy Reliance Group's Delhi Power Distribution units](#)

India's largest electricity generator NTPC is keen to enter in distribution sector. NTPC shown interest in buying majority stake - 51% in BSES Rajdhani (BRPL) & BSES Yamuna (BYPL).

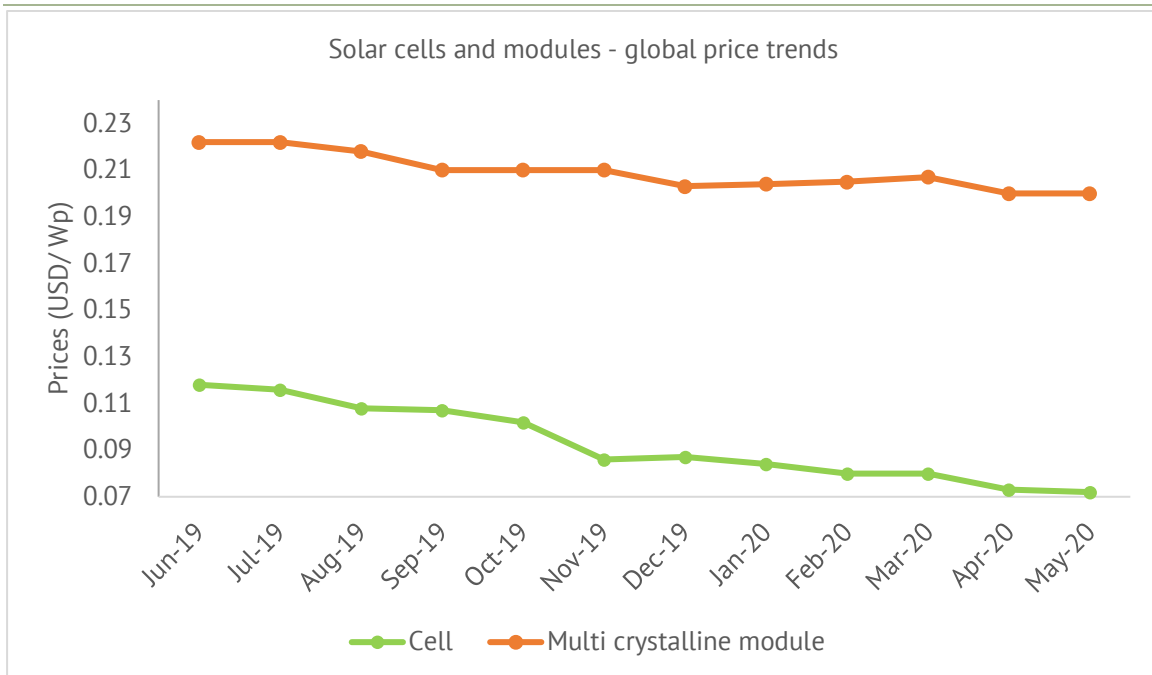
Monthly import-export statistics

Monthly imports as well as exports in Q1 2020 (Jan-Mar) have fallen substantially by about 70% compared to previous quarter.



Source: Ministry of Commerce, JMK Research

Global Price Trends



Source: EnergyTrend, JMK Research

Policy and Regulations

[Advisory to State Electricity Regulatory Commissions \(SERCs\) to allow online listing of petitions and start hearing of petitions through video conferencing](#)

- RE Developers have submitted to MNRE that due to the extended nationwide lock-down in the wake of COVID-19, SERCs have postponed listing and hearing of the petitions.
- RE Developers have emphasised that timely filing and disposal of petitions in SERC is very important and delay in relief from the SERCs will adversely affect the financial viability of their projects.
- They have cited the precedence of Hon'ble Supreme Court, High Courts and APTEL starting the online listing and hearing of urgent matters.
- In view of the above MNRE have requested all SERCs to kindly consider allowing filing and listing of petitions online and hear urgent matters through video conferencing.

[Gujarat Electricity Regulatory Commission \(GERC\) issued detailed order for Solar Power Procurement by Distribution Licensees](#)

- GERC said that in future they will not determine the generic tariff for solar power projects and has decided to determine the tariff for all prospective Solar power projects, based on the rates discovered through competitive bidding.
- Solar power to be procured by DISCOM for small solar projects (from 0.5 MW to 5 MW), the tariff would be average of tariff discovered under the competitive bidding process in different time period of 6 months of the year plus INR 0.20 / kWh.
- For projects commissioned between April – September the tariff would be average of discovered in the competitive bidding by GUVNL during previous six months October-March and adopted by the Commission.
- For projects commissioned between October – March (the tariff would be average of discovered in the competitive bidding by GUVNL during previous six months April-September and adopted by the Commission.
- The new control period of the tariff framework approved in this Order shall be till 31st March, 2023.
- The Plant useful life for has been considered as 25 years.
- Consumers are allowed to install solar power projects to the limit of 50% of its sanctioned load/ contract demand
- Solar Power Project Developers have to furnish a Bank Guarantee of Rs 5 Lakh/MW to GETCO/DISCOMs
- Electricity consumed prior to commissioning of the project for construction purposes, would be construction power and would be billed as per applicable rates
- The Reactive Power Charges shall be as approved by the Commission from time to time would be applicable to the projects.
- 100% transmission losses and charges would be applicable for captive as well as third party.
- Wheeling charges would be 50% for captive use, 100% for third party sale.
- If solar power generator wheels electricity to more than two locations, then he will have to pay INR0.05/unit for the energy fed into the grid.
- CDM benefit can be retained in first year, and it will increase by 10% from second year until it reaches 50%.

- Banking shall be allowed within one billing cycle of the consumer; however peak charges shall be applicable for consumption during peak hours.
- Surplus solar energy not consumed shall be bought by Discom from INR1.50- 1.75/ kWh based on the benefits projects are availing.

GERC issues order for procurement of power from Wind Power Projects below the threshold limit of eligibility for participating in Competitive Bidding

- As per order dated 30th April 2020, GERC said that tariff for all prospective Wind Power Projects shall be determined based on the rates discovered through competitive bidding.
- For Wind Power Projects which are below threshold limit of eligibility for participating in Competitive Bidding shall be considered equal to weighted average of the latest tariff discovered through Competitive Bidding by State owned DISCOMs for Wind Power Projects and is adopted by the Commission.
- The Weighted Average Tariff for wind power projects is worked out to be INR2.78/kWh during the control period.
- This Tariff shall remain in force from 30th April, 2020 to the date of issuance of the new order for adoption of new tariff discovered in the next Competitive Bidding Process conducted by State DISCOMs.

Karnataka Electricity Regulatory Commission (KERC) extends existing tariff for Solar Projects till 31st March 2021

- KERC has extended the validity of the existing tariff for solar projects for grid connected megawatt sizes project till 5MW and grid connected rooftop. The earlier tariff regulation had expired in April 2020.
- The Commission, in its order dated August 01, 2019, had determined a levelized tariff for following category of projects:
 - Grid-connected solar power projects of less than 5 MW capacity at INR3.08/kWh.
 - Grid-connected solar rooftop from 1 kW to 2,000 kW was INR3.07/kWh (without capital subsidy) and INR2.32/kWh (with capital subsidy).
 - Grid- connected solar rooftops for domestic consumers of capacity 1 kW to 10 kW is INR3.99/kWh (without capital subsidy) and INR2.97/kWh (with capital subsidy).
- These tariffs will apply to the entire life of the projects (25 years).
- As per the Commission, the rates of solar modules have been fallen in past one year which would have led to decrease in the tariffs. However due to present situation Commission has decided not to reduce tariff and encourage roof top installations.
- As per the order, tariff will be applicable for all new solar projects for which power purchase agreements (PPAs) have been entered on or after 1st April 2020, and projects which will achieve commercial operation on or after 1st April 2020.
- The validity of this order is for one year from 1st April 2020, to 31st March 2021.

KERC allows lower late payment surcharge for Karnataka Discoms due to present lockdown situation

- KERC has issued an order lowering the late payment surcharges (LPS) by distribution companies (DISCOMS) to generation and transmission companies due to present emergency situation (Covid -19 crisis)

- The reduced rate of LPS is 0.6% per month for delayed payments beyond the date of payment.
- This would be applicable for all the bills generated between 24th March 2020 to 30th June 2020.
- The regular LPS would be payable for bills submitted other than mentioned above duration.
- The LPS rate for RE generators varies between 12% to 24%

KERC extends generic tariff for Wind for next one year

- KERC vide its Order dated 05.06.2018, has mandated procurement of wind power by DISCOMs only through competitive e-reverse bidding, with the Generic Tariff determined by the Commission from time to time, as the ceiling tariff.
- As per the above order tariff determined was made as the ceiling tariff for the purpose of tariff based reverse bidding for wind power projects during FY20.
- Also, above tariff was also made applicable for payment towards any banked energy purchased by the Distribution Licensees.
- KERC has issued an order dated 27th February 2019 issuing the generic tariff for wind power projects as INR3.26 /kWh for FY 2020-21
- As this order validity has expired hence KERC has issued an order that the existing generic tariff of INR3.26 / kWh would be applicable for wind projects in the present financial year.

KERC extends Renewable Purchase Obligation (RPO) compliance for FY 2020 to August

- As per RPO obligation, the obligated entities have to comply with the RPO for FY20, by 31st May 2020 without any penalty and by 30th June 2020 with 10% excess REC purchase, failing which Regulatory commission can take action against.
- However, amid the Covid -19 situation, Regulatory Commission have given the time extension of 3 months to fulfill the RPO by obligated entities.
- Now the obligated entities can fulfill there RPO by 31st August 2020 without any penalty and till 30th September 2020 by procuring 10% excess RECs.

Chhattisgarh State Electricity Regulatory Commission (CSERC) issues order to mitigate the impact of COVID-19 on consumers

- Amid Covid -19 crisis, CSERC has passed an order to reduce the rate of LPS to 12% p.a (translates to 1% per month) payable by DISCOM to generating companies and transmission licensees for the bills generated between 24th March 2020 to 30th June 2020.
- For C&I consumers (including Railways), CSERC has directed CSPDCL to give effect to the following measures in order to provide relief to these consumers in the State:
 - A moratorium of three billing cycles from 1st April 2020 on payment of fixed charges for the following C&I consumer categories - LV 2 Non-Domestic, LV 4 Agriculture Allied Activities, LV 5 Industry, HV 1 Railway Traction, HV 2 Mines, HV 3 Other Industrial and General Purpose Non-industrial and HV 4 Steel Industries.
 - Delayed Payment Surcharge - If the bill is not paid by the consumer within the period prescribed (due date) for bills falling between 1st April 2020 to 30th June 2020, a surcharge @ 1% per month or part thereof, on the total outstanding amount of the bill
- The Commission notes that, for giving effect to above measures, power utilities will be required to borrow/avail additional working capital over and above the Regulations.

- CSERC will take an appropriate view on additional expenses that are occurred due to above mentioned relaxations that are likely to be incurred by state power utilities for maintain the operations during the truing up of FY 2020-21.

JERC issues Clarifications regarding charging of Late payment Surcharge from C&I consumers

- A moratorium on payment of Fixed Charges is provided to all industrial and commercial consumers for the bills raised during the period from 24/3/2020 to 30/6/2020.
- No late payment surcharge shall be levied on fixed charges of industrial and commercial consumers for the bills raised in the above-mentioned period.
- These deferred charges shall be recovered in an equated manner over next three bills to be raised after 30th June' 2020.

JERC issues generic Tariff Order for Renewable Energy Sources for FY 2020-2021

- In compliance of the Renewable Energy Tariff Regulations, 2019, JERC has determined the generic tariff for Solar PV, Wind and Small Hydro Projects for the State of Goa, Andaman & Nicobar Islands, Lakshadweep Islands, Puducherry, Daman & Diu, Dadra & Nagar Haveli and Chandigarh Union Territories.
- This Order is effective from 1st June, 2020 till 31st March, 2021 or till further orders of the Commission whichever is later.
- This is applicable for PV solar, Wind and Small Hydro projects
- Financing conditions considered in Order are:
 - Debt Equity ratio has been considered 70:30
 - Interest Rates for Loan: for Mainland - 9.91%, for Island - 10.91%
 - Rate of Interest on Working Capital: for Mainland - 10.91%, for Island – 11.91%
 - Depreciation rate - 5.83% p.a for first 12 years and remaining depreciation shall be spread during remaining useful life considering salvage value of 10% of project cost.
 - Return on Equity (to be grossed up by prevailing Minimum Alternate Tax (MAT))
 - 14% for RE Projects in Mainland areas;
 - 16% for RE Projects in Island areas;
 - Discount Factor- For Mainland - 9.12%, for Island - 10.21%
 - Escalation Rate for O&M Expenses – 3.93%
- **Conditions specific to solar projects:**
 - Useful life period of 25 years.
 - Capital Cost
 - Mainland Areas: INR5.00 Cr/MW (without capital subsidy);
 - Island Areas: INR6.00 Cr/MW (without capital subsidy).
 - O&M expenses for the first year:
 - Mainland Areas: 1.5% of Capital Cost for first year,
 - Island Areas: 2.0% of Capital Cost for first year
 - Capacity Utilization Factor (CUF) – 17 -18% depending on the location
 - Auxiliary consumption factor- 0.25% of the gross generation
 - The Generic solar tariff based on the above conditions is as below:

States/Union Territories	Tariff Period (Years)	Levellized Tariff	Benefit of Accelerated Depreciation (AD if availed)	Net Levellized Tariff (upon adjusting for AD benefit, if availed)
Goa	25	4.82	0.36	4.46
Chandigarh	25	5.10	0.38	4.72
Dadra & Nagar Haveli	25	4.82	0.36	4.46
Daman	25	4.82	0.36	4.46
Diu	25	4.82	0.36	4.46
Puducherry	25	4.82	0.36	4.46
Andaman & Nicobar Island	25	6.94	0.51	6.43
Lakshadweep	25	6.94	0.51	6.43

Conditions specific to Wind projects:

- Useful life period of 25 years.
- Capital Cost- Mainland Areas: INR6.25 Cr/MW, Island Areas: INR7.00 Cr/MW
- O&M expenses for the first year:
 - Mainland Areas: 1.5% of Capital Cost for first year,
 - Island Areas: 2.0% of Capital Cost for first year
- Capacity Utilization Factor (CUF) – varies between 18 -26 % depending on the location
- Auxiliary consumption factor - 0.25% of the gross generation
- The Generic wind tariff based on the above conditions is as below:

States/Union Territories	Tariff Period (Years)	Levellized Tariff	Benefit of Accelerated Depreciation (if availed)	Net Levellized Tariff (upon adjusting for AD benefit, if availed)
GOA	25	5.06	0.38	4.68
Chandigarh	25	5.06	0.38	4.68
Dadra & Nagar	25	5.06	0.38	4.68
Daman	25	4.79	0.36	4.44
Diu	25	3.50	0.26	3.24
Puducherry	25	4.34	0.32	4.02
Andaman & Nicobar Island	25	6.83	0.50	6.33
Lakshadweep	25	6.88	0.51	6.38

Conditions specific to Small Hydro projects:

- Useful life period of 35 years.
- Mainland Areas Capital Cost:
 - Below or equal to 5 MW: INR 7.79 Cr/MW,
 - Above 5 MW and below or equal to 25 MW: INR 7.07 Cr/MW INR 6.25 Cr/MW
- Island Areas Capital Cost:
 - Below or equal to 5 MW: INR 10.50 Cr/MW,
 - Above 5 MW and below or equal to 25 MW: INR 9.00Cr/MW

- O&M expenses for the first year:
 - Mainland Areas: 2.0% of Capital Cost for first year,
 - Island Areas: 2.5% of Capital Cost for first year
- Capacity Utilization Factor (CUF) – 30%
- Auxiliary consumption factor – 1% of the gross generation
- The Generic small hydro tariff based on the above conditions is as below

Type of SHP	Tariff Period (Years)	Levellized Tariff	Benefit of Accelerated Depreciation (AD if availed)	Net Levellized Tariff (upon adjusting for AD benefit, if availed)
Mainland Projects				
Lower than or equal to 5 MW	35	4.63	0.31	4.32
Above 5MW and lower than or equal to 25MW	35	4.21	0.28	3.92
Island Projects				
Lower than or equal to 5 MW	35	7.09	0.48	6.61
Above 5MW and lower than or equal to 25MW	35	6.08	0.41	5.67



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