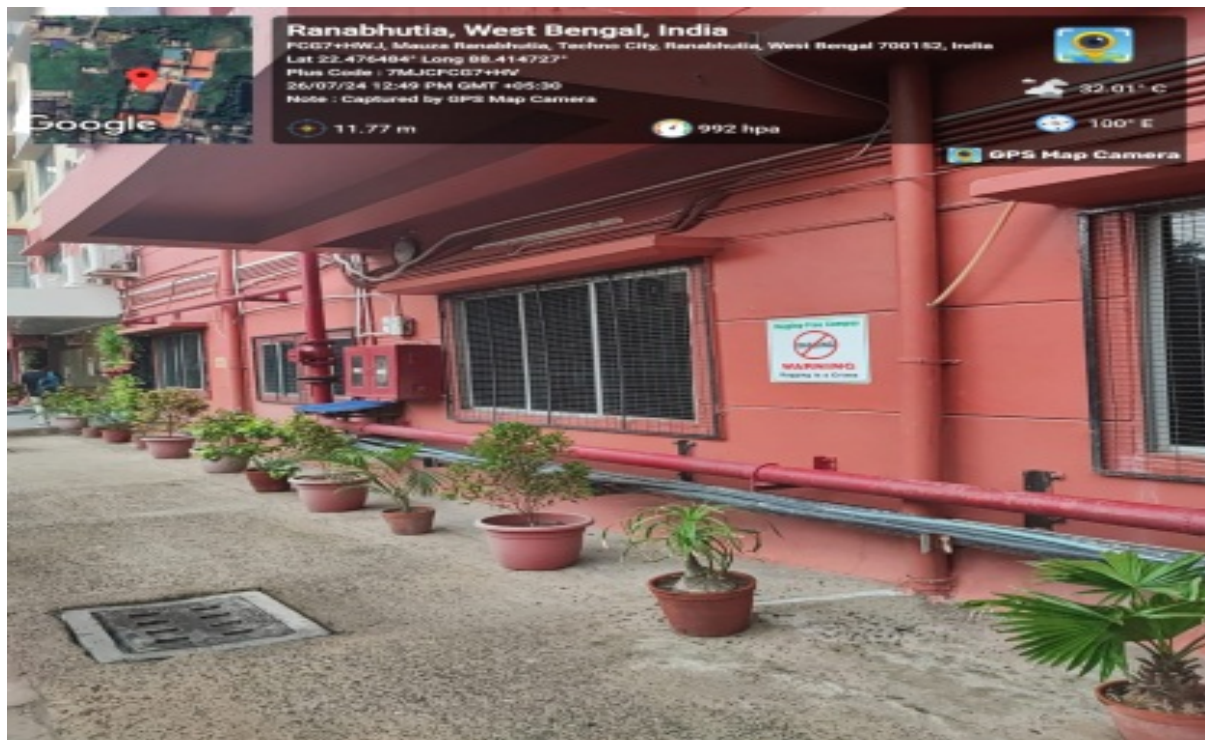


Rain water Harvesting



[A]: Collection area (20 m x 5.5 m X 2 m)

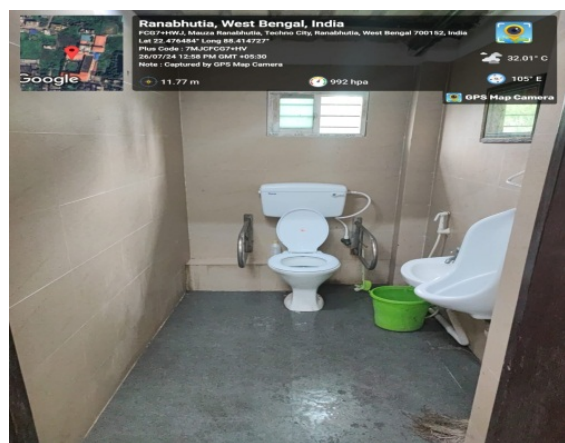


[B]: Conduit



[C]: Reservoir /storage (12.5 m X 10 m X 1.6 m)

Disabled-friendly Environment



Management of the various types of degradable and non degradable waste



GREEN POLICY

OF

NETAJI SUBHASH ENGINEERING COLLEGE

About the College:

Netaji Subhash Engineering College, affiliated to the Maulana Abul Kalam Azad University of Technology (formally known as West Bengal University of Technology), is the first self-financed engineering college in West Bengal. It is located at Garia, Kolkata. It was established in 1998 to promote the technical education in the state. Since then, the College has been serving the society by educating its population.

Green Policy:

The Green Campus Policy of the college aims towards a Clean and Green campus where environmental friendly practices and education combine to promote sustainable and eco-friendly practices in the campus and beyond the campus. It also offers the institution an opportunity to redefine its environmental culture through inculcating environmental ethics among the students and staff.

Taking into account the necessity of protecting environment for a sustainable, pollution-free and healthy life on the planet Earth in the coming years, the college has formed its Green Protocol. The college is determined to follow the policy strictly by implementing it. The college also acts to create environmental consciousness among the students, staff and the local community in general on a continuous basis through various related activities within and outside campus. The college is dedicated to create a clean, green and healthy environment in the campus.

Aims:

It aims to create environmental consciousness among the community and acts towards a sustainable, pollution-free and healthy environment, hence to protect our mother earth.

Objectives:

- To aware the students and the staff to minimize the use of polluting products and use environment-friendly products and services.
- To inculcate the importance of cleanliness for a healthy life among the staff, students and the society.
- To create environmental awareness by organizing various activities inside and outside the campus.
- To aware the trainees, staff, local community and in general the society about the proper disposal of wastage and adopt health & environment friendly practices.

Initiatives to implement the Policy:

To implement this policy, the following measures have been taken:

❖ Plantation of Trees and Plants:

The college campus is fully protected by a well-constructed boundary wall on all sides. The college has a large green campus with both big trees and small shrubs which offer a very eye-soothing view to all. The college will encourage the maintain the GREEN of the campus.

❖ Cleaning the campus on regular basis:

All the staff and students will participate in the cleaning programme as an inseparable part of Swachh Bharat initiative. Social awareness programmes will be organized every year to spread awareness regarding various environment related contemporary issues.

❖ Observance of “Environment Day”:

Every year the World Environment Day will be celebrated to spread the values and importance of environment in our life. Every year plantation initiatives will be taken and saplings will be planted both in the ground and earthen pots.

❖ Motivating the Society to take part in green initiative:

The college will take initiatives to include gifting plants in the felicitation of guests and resource persons as a part of GREEN INITIATIVE.

❖ Creating a small space garden of Medicinal Plants:

One small garden for medicinal plants has been constructed. Some basic medicinal plants e.g. Ocimum sanctum, Aloe vera, Ocimum gratissimum, Andrographis paniculata, Phyllanthus emblica, Curcuma longa, Amomum subulatum, Syzygium aromaticum, Azadirachta indica, Catharanthus roseus etc. are grown here.

❖ **Reducing the use of Plastic and converting the campus as “No Smoking Zone”:**

The entire campus will be a “No smoking zone”. Use of plastic will be drastically minimized.

❖ **Rain Water Harvesting:**

This technology is used to conserve rainwater by collecting, storing, conveying and purifying of rainwater that runs off from rooftops, roads, open grounds, etc. for later use.

❖ **Motivating the Stakeholders to take part in Green Initiatives:**

There is a practice to plant saplings of indigenous trees (prepared in the college) each year. Plant saplings are gifted to other places also.

❖ **Engaging the Alumnus in green initiatives:**

The alumni of this college have always been involved in all good and positive initiatives undertaken by the college. **Alumni** organize meetings on the theme of environmental awareness.

❖ **Paperless work and communication:**

The college has a policy to minimize the use of paper in all types of official/academic Work and communication through E- Communication. The use of paper is substantially reduced through digitization. One-side blank pages are re-used for rough work to avoid wastage of paper. All the college staff, faculty and students have been provided the college E-mail IDs through LMS “Google Workspace for Education. They communicate for the required official and college-related academic activities through What’s app - Class-wise groups, Department wise groups, Committee wise groups and Activity wise groups that have reduced the usage of paper in notices and circulars. Moreover, the college has avoided massive usage of paper by introducing the "Virtual Classrooms" wherein references, notes, syllabi, question banks, study material are stored and shared on the e-platform. Some departments have also started accepting E-assignments. The admission procedure has been performed totally online. Examination form fill-up, marks up-loading, etc. are also been performed through online portal. Examinations and classes are also held online in the year of COVID/Lockdown. Library has also been fully automated with the software package LibSys. As a result paper use has been minimized otherwise required for book processing and circulation process. These practices has been proved highly beneficial to save money, boost productivity, save space, make documentation and information sharing easier, and help the environment.

❖ **To encourage using Bi-cycles in the campus and reducing the use of Diesel-Petrol:**

Students will be encouraged to use bi-cycle instead of diesel-petrol vehicles.

❖ **Environment Consciousness through creative Wall Posters**

Wall posters will be especially dedicated on “Environmental awareness” theme. Every year a few writings are to be taken on the theme students.

❖ **Environment awareness through various activities:**

The college organizes various activities and programs such as street play, rally in the local area, tree plantations, and cultural activities to aware all the stakeholders and the society.

❖ **Solid Waste Management:**

All the Departments, laboratories, and Classrooms will be provided with bins for dry wastage disposal. Segregation of the waste into dry and wet waste will be done through the separately allotted dustbins at strategic locations in the college.

- Landfills: Throwing daily waste /garbage in the landfills are done which eliminates odors and dangers of waste.
- Composting: The remains of the dead plants and kitchen waste from the canteen is turned into nutrients rich food for plants in the form of compost.

Faculty members and college students are motivated to segregate plastic from normal waste and dispose of it accordingly. Regular waste management is done by selling off the unwanted material to the local vendors.

❖ **E-waste Management:**

Old batteries, computers and wires will be segregated and sold off at regular intervals. The college repairs the old broken items instead of buying new ones.

❖ **Use of LED Bulbs/Tubes and Power Efficient Equipment:**

We are trying to maximize the use of LED bulbs, tubes and power efficient equipment.

❖ **Solar Plant in the College:**

The college will take the Initiatives have to implant solar plant in the college. Inspection has been done, proposal approved and work are in progress.



PURCHASE ORDER

PO Number : PO/C/109/2023-24/NSEC Store/00098 PO Date : 02-12-2023 Status: Approved

Vendor Address : M/S, R S POWER SOLUTION 75, Ramkrishna Pally, , Chandmari Road, Kolkata - 711109 West Bengal , India	Site Address NSEC Store Mauza Ranabhutia, Garia, Kolkata , West Bengal , India
Email id : sales@rspowersolution.com Contact Person : Mr. Sanjib Guha Contact : 8335062534 PAN No. : GSTIN :	Contact Name : Contact Email : Contact No : GSTIN : Exicse No. : Service Tax No.: CST No. :
Invoice Address :	

Sr No.	Description	Specification	Qty	UOM	Price	Discount	Tax	Charge	Item Cost
1	12V 26Ah SMF Battery (Make/ Model: Exide NXTPLUS 26) against Buyback	Buy Back Rate of Scrap Battery Rs. 850 (including GST @18%; Total Buy Back Amt: Rs. 85 X 850 = 72,250 (to be deducted from Grand Total); Total Order Value: Rs. 197,030	85.00	No.	2,475.00	0.00	58,905.00	0.00	2,69,280.00

Tax Details	
CGST 14%_INPUT	29,452.50
SGST 14%_INPUT	29,452.50
Grand Total :	Rupee Two Lakh Sixty Nine Thousand Two Hundred Eighty Only 2,69,280.00 INR

Grand Total (Base Currency):	Rupee Two Lakh Sixty Nine Thousand Two Hundred Eighty Only 2,69,280.00 INR
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Approver Comments : ok

Terms and Conditions

Payment Term :
Payment Method : Cheque
Shipping Method : By hand
Shipping Payment Method : To be paid by Vendor
Advance Paid : 0.00

Purchase Clauses

- Rate: The total order value i.e, Rs. 269,280 – Rs. 72,250 (buy Back Amt for 85 batteries) = Rs. 197,030 is inclusive of all taxes, delivery, Installation and other charges (if any).
- Warranty: There should be a warranty for a period of 36 months from installation of Batteries.
- Delivery Period: The delivery should be made within 5-10 days from the date of issuance of commercially clear order.
- Payment Term: 50% Advance on issuance of order against proforma invoice and balance payment will be made within 30 days after completion of installation and submission proper Tax Invoice.
- Delivery or Billing Address-Netaji Subhash Engineering College,Technocity, Panchpota, Garia, ,Near Garia Railway Station, Kolkata- 700152
- Late Delivery/ Completion: LD clause will be effective, if the delivery not done within the "Delivery / Completion Period" mentioned above, @ 0.5% per week, subject to maximum 10%.
- Delivery Charges/service: Free including packaging and installation.
- Price Escalation: No price escalation will be considered.
- Rejections / Cancellation: Any item supplied / work done by you, if found Defective / Damaged / Incomplete, will be rejected/cancelled and the same shall be replaced / reworked within 3 days of supply / work, otherwise this order will be liable to be cancelled without any claim for loss & damage to us.
- ATO: Company will have the right to amend the order at any time before delivery/completion of supply/ work.
- Specification:Material should be strictly as per specification approved by the company. No deviation from the approved specification will be accepted unless prior written consent is obtained from the authorized person of the company. Delivery of Warranty and Installation Certificate is mandatory.
- Documents Required for Submission of Bill: Original bill with two photocopies. Photocopy of Supply Order. Original Challan with Security-IN-Seal, Signature with Date. Copy of Installation and Warranty Certificate (where applicable). End User / Receiver's Signature and Date with Stamp. GRN Received from the Institute Your GST No. and PAN No should be mentioned in the Bill. Your A/c No., Bank name, Branch and IFSC code for RTGS All payment will be made subject to all statutory deductions as per Govt. norms. All disputes will be subject to Kolkata jurisdiction. Kindly acknowledge receipt of this order.



PO Number : PO/C/109/2023-24/NSEC Store/00098

Vendor : M/S, R S POWER SOLUTION

Comments

: Area / Work: Campus; Netaji Subhas Engineering College, Garia
Description: Supply/ Replacement of 85 nos. of Batteries with buy back of old 12V, 26 AH batteries for 06 nos. online UPS.

UPS Details: [UPS SI No./ Rating/ Make/ No. of Batteries/ Location: 03MT184 (10KVA GREEN POWER UPS; 15 nos; ECE DSP Lab), 200649J72269 (6KVA, Emerson UPS; 16 nos; ECE Microwave Antenna Lab), 03MT183 (7.5KVA Green Power UPS; 14 nos; IT Project Lab), III072204155 (2KVA Numeric UPS; 8 nos; ECE Adv Comm Lab), 900061510120150 (6KVA Switching AVO UPS; 16 nos; Networking Lab(Temporary location), 200649J2272 (6KVA, Emerson UPS; 16 nos; IT PL2 Lab)

Contact Details:

Vendor- Mr. Sanjib Guha (M): +91-8335062534 (Email): sales@rspowersolution.com
Contact Person-System, NSEC – Mr. Amit Nandy (M): +91-9830195340 (Email): amit.nandy@nsec.ac.in
A/C, NSEC - Ms. Chaitali Halder (M): +91-9830227383 (Email): halder.chaitali@gmail.com

Created By

Acknowledged By

Authorised Signature and Date



PO Number : PO/C/109/2023-24/NSEC Store/00098

Vendor : M/S, R S POWER SOLUTION

Item/Service Name	Taxable Amount	Taxes						Total Applied Taxes
		CGST		SGST		IGST		
		%	Value	%	Value	%	Value	
12V 26Ah SMF Battery (Make/ Model: Exide NXTPLUS 26) against Buyback	2,10,375.00	14.00	29,452.50	14.00	29,452.50	0.00	0.00	58,905.00
						Total Taxes		58,905.00



Techno-Commercial Proposal
for
100.98 kW(DC) Rooftop Solar PV System
for
Netaji Subhash Engineering College
24 PARAGANAS SOUTH, West Bengal

Document No. EXIDE07548/1

Date 28-Sep-2023

Ref. No. EXIDE07548/1

Dated: 28-Sep-2023

To,

Soumava Goswami

FCG7+HWJ Mauza Ranabhutia Techno City Ranabhutia West Bengal 700150 India

Mob: (983) 007-0668

**Sub: Techno-Commercial Proposal for setting up 100.98 kW(DC) Rooftop Solar Power Plant for
Netaji Subhash Engineering College at 24 PARAGANAS SOUTH, West Bengal 700150**

Dear Sir/Madam,

We thank you very much for showing your interest in Exide Sunday Solar Solution & to its' product & services.

Based on your requirement and further assessment, we are pleased to submit our Techno-Commercial proposal for supply and execution of 100.98 kW(DC) Rooftop Solar Power Plant along with the Scope of Work, and other Terms & Conditions for your kind perusal.

Throughout the document, Exide's authorised Channel Partner shall be referred to as "The Company".

Please contact the undersigned for any further clarification and confirmation.

Thanking you and assuring you of our best attention at all times.

Yours Sincerely,

**(An authorised Channel Partner of Exide
Industries Ltd.)**

Phone:

E-mail:

Introduction:

Exide being one of the largest manufacturer of the Lead Acid Batteries in India have been offering energy solutions for various applications such as Home UPS, Institutional UPS, Railways, Telecom, Solar, Power, Traction for more than 70 years with the right product to meet the application demand successfully and being well accepted in the market in terms of the quality and reliability.

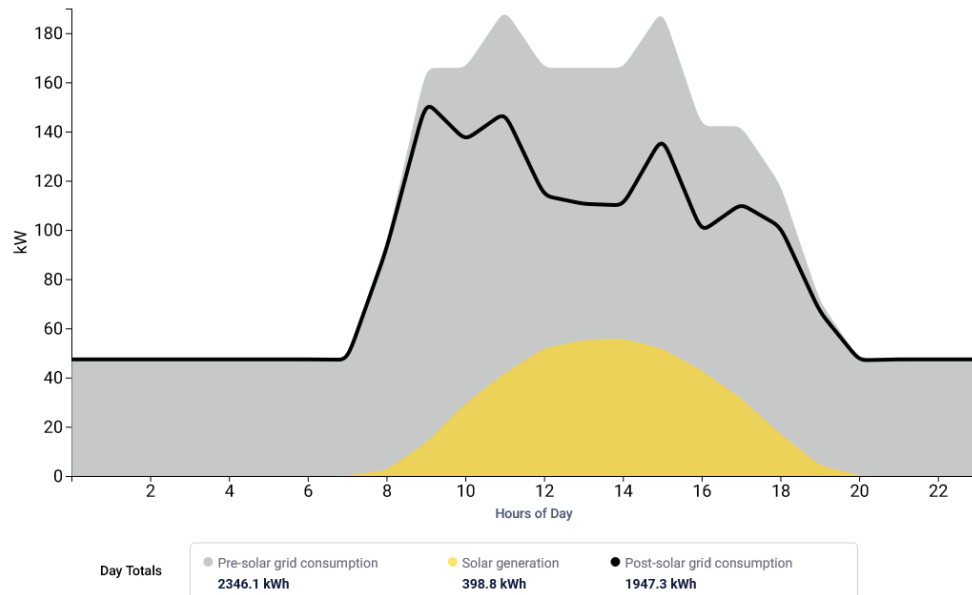
The power requirement of domestic and commercial consumers is increasing exponentially where the challenge is to meet the demand through either Grid or Renewable Energy Sources. While these applications are new and expanding, the shift towards an expanded role for battery energy storage in the de-regulated electricity market is becoming evident. The products offered under Exide Sunday Rooftop Solar Systems bear the trust and performance assurance that is associated with the Exide brand. The unique configuration of components curated for every requirement attribute to enhanced reliability, most optimum utilization and user friendliness of the system.

**(I) TECHNICAL PROPOSAL****A. Project Overview**

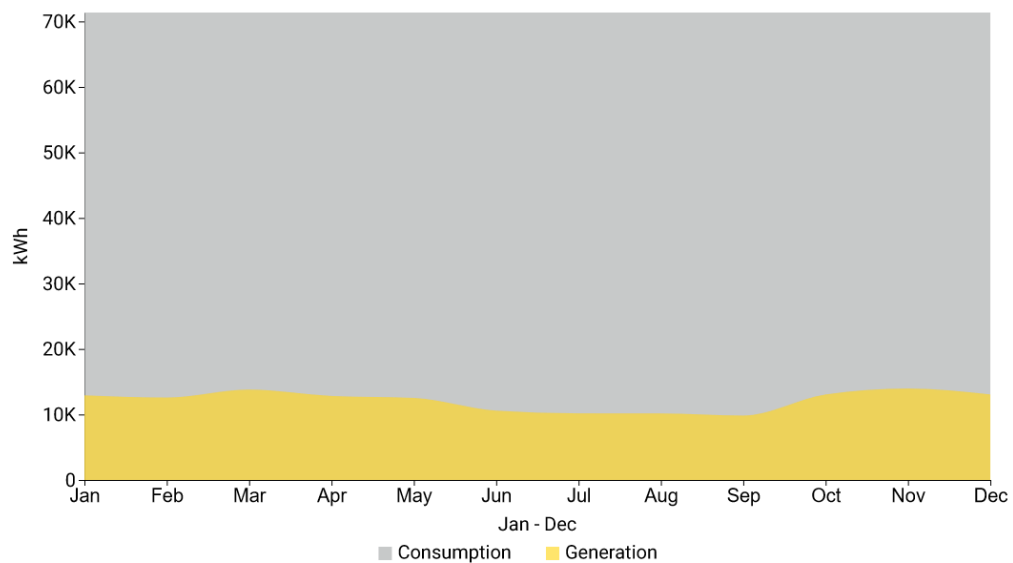
- Site Location: FCG7+HWJ Mauza Ranabhutia Techno City Ranabhutia West Bengal 700150 India, 24 PARAGANAS SOUTH, West Bengal 700150
- Zone: East
- Application:
- PV Array capacity: 100.98 kW(DC)
- Estimated Annual Solar PV Generation (first year): 1,45,562 kWh

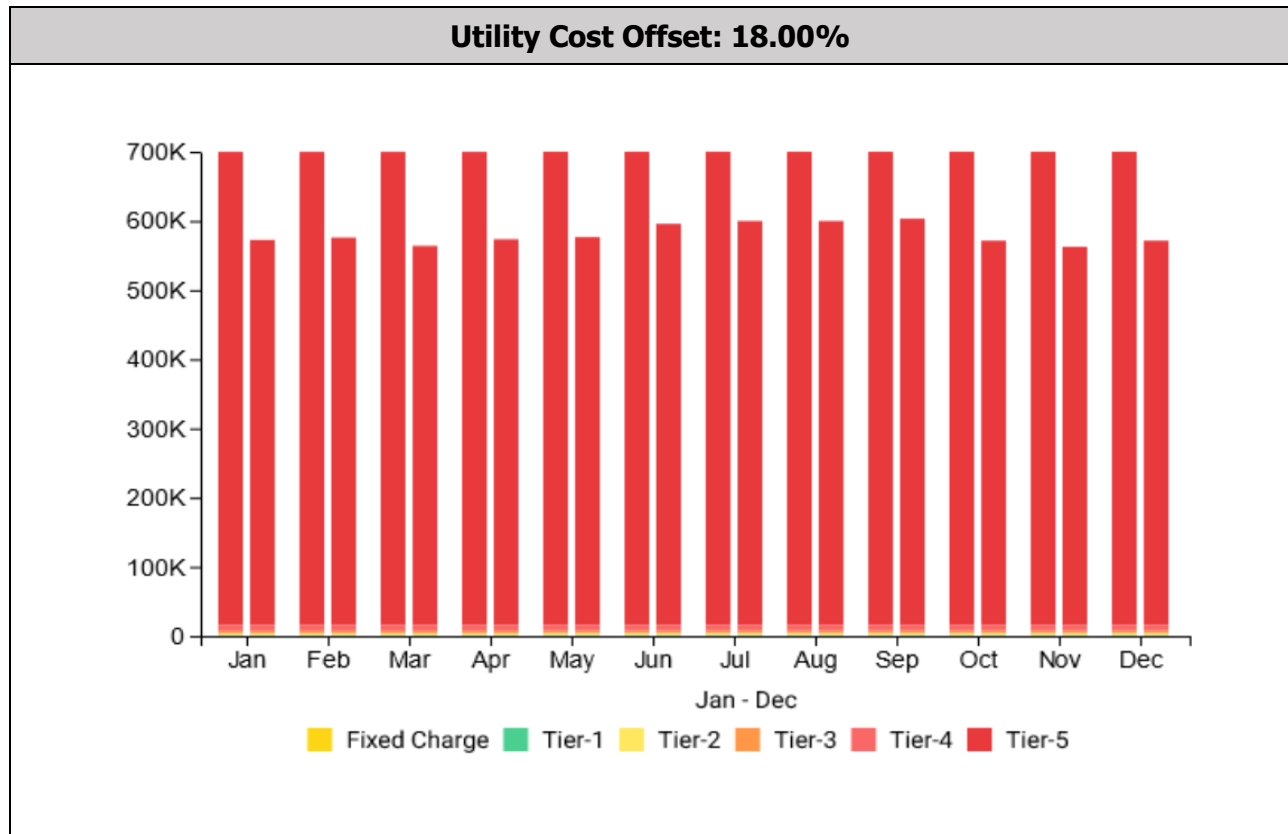
Proposed Array Layout

Typical Load Profile with Solar



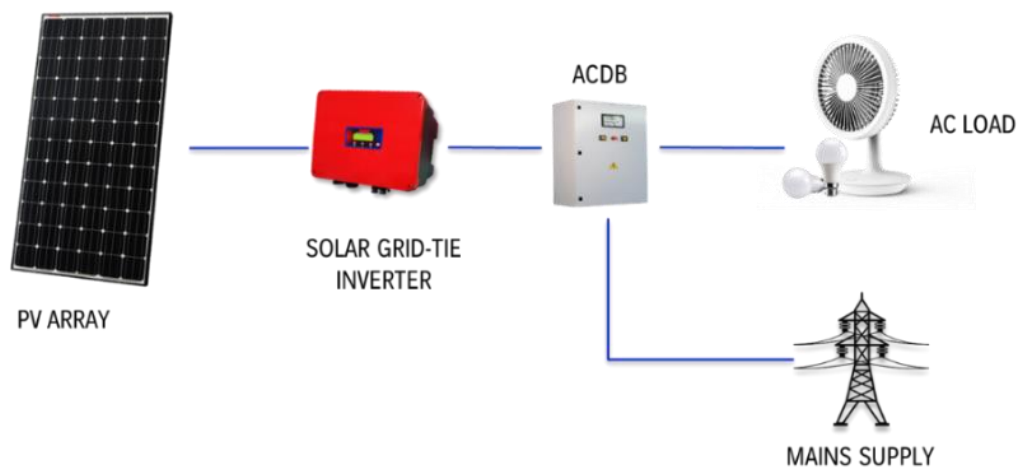
Estimated Annual Energy Offset: 17.00%





Note: Figures specified above are indicative only and shall vary based on actual generation, weather conditions, electricity tariff, on-site ambient conditions and financing model opted by the end user

B. SYSTEM SCHEMATIC



A. Scope of Work and Considerations

- This offer includes design, supply of materials to site, installation and commissioning of items as necessary to set up solar plant of rated capacity as specified in Section (I)-A.
- The space considered for PV array is as confirmed by the client during survey. This offer will stand invalid if the designated PV array location is changed. End user is to ensure adequate load bearing capacity of the roof for catering dead and live loads imparted by PV array after installation along with sufficient approach path to the designated location.
- End user must provide adequate covered, dust-free and well-ventilated space for installation of Inverters, batteries and switchgears
- Connectivity of Mains supply to Solar PCU input and Power evacuation and distribution of loads including connection between Solar PCU output to load centre shall be in end user's scope
- It is assumed that electricity supply as required for erection purpose, along with treated water source will be made available by end user at the proposed project site for construction, cleaning of PV modules and other maintenance purposes on a free of cost basis. No separate water source and water treatment plant has been considered for the project
- Any Statutory approval, Govt. liaison will be kept out of purview of solar PV plant commissioning. Any subsequent charges involved in approval from DISCOM/Govt organization for supply/installation/inspection/approval of metering arrangement have to be borne by the end user.

B. PROPOSED MAKE LIST

Sl. No.	Item	Proposed Make
1	Solar Module	Exide
2	Solar Inverter	Exide
3	Module Mounting Structure	Standard
4	DC switchgear	OBO/Mersen/Equivalent
5	AC switchgear	ABB/Schneider/Equivalent
6	DC Cables	Polycab/KEI/Equivalent
7	AC Cables	Polycab/Equivalent
8	Earthing System	SABO/JMV/Equivalent
9	Lightening Arrestors	SABO/JMV/Equivalent
10	Cable accessories	Reputed

(II) COMMERCIAL PROPOSAL

A. EPC PRICE

The price proposed in below table for EXIDE SUNDAY RTSS (excluding GST and transportation charges up to site) is for the EPC work of solar power plant.

Description	Basic Price
a) Supply of Exide RTS Components - Exide EIL540M144 Photovoltaic Module x 187 - Exide ADITYA GT3-50K x 2 b) Supply of BOS items - Module mounting structure - DC Switchgear - AC Switchgear - DC and AC cable - Earthing components - Cable accessories and miscellaneous components as required c) Installation & Commissioning work for 100.98 kW(DC) Rooftop Solar PV Plant inclusive of electrical and civil work as required to setup system defined in Section (I)-A d) 5 years of comprehensive Operation & Maintenance	₹ 45,56,013
(In Words: <u>Forty Five Lakh Fifty Six Thousand Thirteen Only</u>)	

B. OFFER VALIDITY

Notwithstanding any other clause within this offer document, this offer shall be valid up to 30 days from the date of this offer.

C. TAXES & DUTIES

GOODS & SERVICE TAX (GST) : GST on supply, Installation & Commissioning shall be charged extra on the basic price specified above

STATUTORY VARIATION OF TAXES & DUTIES : Any entry tax, octroi or any other charges applicable shall be in the scope of client. Any statutory variation of taxes and duties and imposition of any new tax or duty shall be paid by the end user as per indication in the invoices.

D. PAYMENT TERMS

- 30 % of Contract price for supply & service shall be paid as an Advance against receipt of techno-commercially clear Purchase order/LOI or signing of this Contract Agreement.
- 60 % of Contract price for supply and service to be paid on material readiness before dispatch of materials at site against submission of Pro-forma Invoices.
- **Balance** 10 % of contract price after successful commissioning and handover of plant.

Note: All payments to be released to the Company within 7 days of submission of invoices.

E. WARRANTIES & GUARANTEES

EXIDE SUNDAY WARRANTY:

Exide Sunday Rooftop Systems bear comprehensive 5 Years warranty* on the installed system. Exide Industries Ltd. shall issue EXIDE SUNDAY RTSS WARRANTY CARD to the Customer after due validation of installation directly by Authorized Exide Personnel at Customer site, without which the Exide SUNDAY warranty shall not be applicable. Adjudication of Warranty Claims if any is subject to Terms & Conditions applicable & as mentioned in EXIDE SUNDAY RTSS Warranty Card.

FOR EQUIPMENT

- **Solar PV Module limited product warranty:** 10 years
- **Solar PV Module Power Output warranty:** Linear power output warranty for 25 years with 80% power output at the end of 25th year at STC. Warranty on solar modules will be governed by EIL's Limited Warranty Certificate on Solar PV Modules.
- **Inverter:** The Exide Aditya Grid Tie Inverters are warranted against manufacturing defects arising out of faulty or defective materials or workmanship for a period of 84 months from the date of purchase. Consumable items such as inverter LCD screen, Switches, DC & AC connectors, DC & AC Fuses, DC & AC Surge Protection Devices shall not be covered under warrantee. Warranty will be governed by EIL's Limited Warranty Certificate on Solar PCU.
- **Balance of System:** 5 years from the date of commissioning of the plant against defects in design and workmanship of components.

***FOR ERECTION & INSTALLATION:** 5 years from the date of commissioning of the plant.

The warranties as mentioned above shall not apply to any defects resulting from:

- Installation and/or maintenance of any piece of equipment by a third party.
- Misuse or abuse of equipment, willful damage or negligence by customer or a third party
- Normal wear and tear
- Force Majeure events
- Any reason not attributable to the Company

F. COMPREHENSIVE MAINTENANCE SERVICES

The Company shall provide efficient after-sale service for a period of 5 years from the date of commissioning and handover. The Company, during this period shall attend any minor/major breakdown of the system upon receipt of call/request from the client's end and shall take up necessary measures for repair/modification/replacement of the system/equipment (including warranty services of items/equipment) either by visiting the site or through remote access. However, such repair/modification/replacement of items will be done after proper analysis of the fault reason and no such repair/modification/replacement will be done by the Company in case the reason of fault is not attributable to the Company or manufacturer.

Preventive maintenance procedures such as cleaning of solar PV modules, periodic/scheduled maintenance/checking of installed solar plant equipment shall be done considering 1 visits per year along with attending break-down maintenance as and when required. However, the Company shall submit Operation & Maintenance manuals and provide training to clients' personnel after commissioning or handover of the solar plant.

G. OTHER TERMS & CONDITIONS

- 1. FORCE MAJEURE:** In the event of a purchase contract neither of the contractual Parties shall be liable for not fulfilling the same as a result of force majeure, viz. natural calamities such as typhoons, earthquakes, tsunamis, hurricanes, floods, war, act of terrorism, riot, civil disturbance, insurrection, military uprising generally known as act of God. If the force majeure event should continue beyond 60 days either of the party shall have the right to terminate the contract through written confirmation.
- 2. CONSEQUENTIAL LOSSES:** EIL in no event be liable for loss of profit, loss of revenues, loss of use, loss of production, costs of capital or costs connected with interruption of operation, loss of anticipated savings of for any special, indirect or consequential damage or loss of any nature whatsoever.
- 3. ARBITRATION:** All disputes arising in connection with the resultant purchase orders / contracts shall be finally settled and governed by the provisions of Arbitration and Conciliation Act, 1996. The arbitration panel shall consist of three arbitrators, one to be appointed by each party and third arbitrator shall be appointed by the two appointed arbitrators. The third arbitrator shall serve as a chairman. The award of the arbitral tribunal shall be final and binding on both parties. The place of arbitration shall be Kolkata in India. The proceedings shall be conducted in English Language.
- 4. CONFIDENTIALITY:** The information shared by both parties of any nature, specially intellectual property, during tendering or execution of the contract will be treated confidentially. The Confidentiality of this offer should be maintained strictly and in no case, unless with our written consent, this document can be shared, disclosed, reproduced, copied or circulated.

PROPOSAL SIGN-OFF

The company proposes to install Exide SUNDAY RTSS as outlined in this proposal for an amount of ₹ 45,56,013 only (taxes extra).

Additional charges shall be included to the offer price if changes are made by the end user after this document have been signed-off.

Phone: E-mail:	Soumava Goswami FCG7+HWJ Mauza Ranabhutia Techno City Ranabhutia West Bengal 700150 India 24 PARAGANAS SOUTH, West Bengal 700150 Mob: (983) 007-0668 Date:
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