**Information Memorandum**

**20 MW Rooftop Solar Project**

|  |  |
| --- | --- |
|  |  |
| *Maharaja Suheldev Autonomous State Medical College Bahraich (723.84 + 928) kWp* | *Maharaishi Vashishtha Autonomous State Medical College Basti (373.52 + 726.16) kWp* |
|  |  |
| *District Hospital Gonda (704.7 + 300.44) kW* | *Madhav Prasad Tripathi Medical College & Hospital Siddharthnagar* |

**OMC Power Private Limited**

**February 2025**

**1. Data about the company and the promoters :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Director** | **KYC Document** | **Document No.** | **Date of Birth** | **Address** |
| Rohit Chandra | PAN | AAAPC0554F | 07-Jul-1964 | India |
| Daisuke Nakahara | Passport | TR1704451 | 22-Aug-1976 | Japan |
| Motoyasu Iijima | Passport | TR5011012 | 17-June-1983 | Japan |
| Kazuya Miyake | Passport | TT2201915 | 03-Nov-1968 | Japan |
| Fumiaki Kashimori | Passport | TT2350096 | 26-Jan 1973 | Japan |
| Parantap P Dave | PAN | AABPD3026E | 29-Apr-1961 | India |
|  | Passport | TT1811279 | 31-May-1970 | Japan |

|  |  |
| --- | --- |
| Main Contact | Pooja Raman, Legal Counsel Investment Lead, OMC Power |
| Registered Address | 603, Tower , Unitech Business Zone, Nirvana Country, South City 2, Sector 50, Gurgaon HR 122018 |
| Admin Office | Same as above |
| GST | 09AAECC3802H1ZW (Uttar Pradesh)  06AAECC3802H1Z2 (Haryana) |
| PAN | AAECC3802H |

**2. Brief Background of the Firm / Group & Management**

A term loan of **Rs.62.53 crore** is requested for OMC Power Private Limited for installing the solar rooftop project at thirty five locations in the state of Uttar Pradesh. OMC Power is an existing client of SBI. Two term loans have been sanctioned to the company totaling Rs.17.60 crore (Term loan I in Aug-2023 for 4.50 MW) and Rs.22.80 crore (Term loan II in Jan-2025 for 6.56 MW).

The company is a portfolio company of Japanese global giants - Mitsui and Chubu Electric. Both the Japanese companies together are majority owners of the company. Mitsui first invested in the company in 2017 and Chubu first invested in the company in 2022. Together they have brought substantial capital in the company with multiple rounds of capital infusion.

The company was incorporated on 11th April 2011. Over the years, OMC built its businesses related to :

* Solarisation of telecom towers under PPAs with Indus Towers and ATC Power Infrastructure
* Smart minigrids in rural UP
* Rooftop solar for healthcare segment and other Governmental departments in UP
* Solar EPC business in rural UP

The proposed 20 MW project will further consolidate the footprint of OMC in the healthcare sector in Uttar Pradesh. The previous two projects funded by SBI also focused on putting solar rooftop capacities in reputed hospitals in UP such as King George Medical University, AIIMS Raebareli etc. The company currently has an installed solar rooftop capacity of 11.06 MW. With the proposed project, the company will enhance its solar rooftop capacity to 31.06 MW. The company plans to install around 100 MW additional solar rooftop capacity in the next financial year. The company has won a UPNEDA bid to supply 110 MW to various government institutions at an attractive tariff of Rs.4.85 per unit.

The financial assistance from SBI is proposed to be spread across a 15-year period including a 6 months moratorium on principal repayment. The loan of **Rs.62.53 crore** will be repaid in 174 equal monthly installments of **Rs.35.93 lakh** each.

In FY 2023-24[[1]](#footnote-1), the firm recorded total operating income of Rs.35.87 crore (PY - Rs.19.90 crore); EBIDTA stood at Rs.8.74 crore (PY Rs. 4.09 crore) and profit after tax of (-) Rs. 44.92 crore (PY (-) Rs.23.67 crore). The net worth of the firm stood at Rs.260.42 crore (PY: Rs.305.24 crore) as on 31.03.2024.

The proposed loan will be secured by:

1. Charge on project assets of the company being funded by this loan,
2. Charge on escrow account where all receivables from the 35 locations will be routed through.
3. Debt service coverage reserve of 3 Month Interest and Principal

**3. Scope of Project**

The 20 MW solar project will be located on the rooftop of 35 govt hospitals at the following locations :

| **SN** | **Hospital** | **Site Type** | **Cap (KW)** |
| --- | --- | --- | --- |
| 1 | Maharaja Suheldev Autonomous State Medical College Bahraich | Medical College | 1,566 |
| 2 | Maharaishi Vashishtha Autonomous State Medical College, Basti | Medical College | 1,100 |
| 3 | Lok Bandhu Shri Raj Narayan Combined Hospital, Lucknow | District Hospital | 502 |
| 4 | Tej Bahadur Sapru Hospital, Prayagraj | District Hospital | 436 |
| 5 | District Hospital Male, Barabanki | District Hospital | 101 |
| 6 | District Female Hospital (MCH Wing), Barabanki | District Hospital | 205 |
| 7 | Balrampur Hospital, Lucknow | District Hospital | 693 |
| 8 | Netaji Subhash Chandra Bose District Hospital, Gorakhpur | District Hospital | 451 |
| 9 | District Hospital, Meerut | District Hospital | 453 |
| 10 | District Hospital, Basti | District Hospital | 328 |
| 11 | Pt. Din Dayal Upadhyay Combined Hospital, Moradabad | District Hospital | 693 |
| 12 | Pt. Din Dayal Upadhyay Combined Hospital, Aligarh | District Hospital | 507 |
| 13 | District Combined Hospital, Auraiya | Medical College | 535 |
| 14 | District Hospital, Lalitpur | Medical College | 751 |
| 15 | District Hospital, Gonda | Medical College | 1,005 |
| 16 | District Hospital, Chandauli | Medical College | 638 |
| 17 | District Women Hospital, Bijnor | Medical College | 788 |
| 18 | District Hospital, Etah | Medical College | 933 |
| 19 | District Male Hospital, Sultanpur | Medical College | 945 |
| 20 | District Hospital, Sonbhadra | Medical College | 501 |
| 21 | Madhav Prasad Tripathi Medical College & Hospital, Siddharthnagar | Medical College | 752 |
| 22 | Dr. Sonelal Patel Govt. Hospital & College, Pratapgarh | Medical College | 800 |
| 23 | Motilal Nehru Divisional Hospital, Prayagraj | District Hospital | 300 |
| 24 | District Combined Hospital, Amroha | District Hospital | 480 |
| 25 | District Combined Hospital, Maunathbhanjan | District Hospital | 458 |
| 26 | District Combined Hospital, Shamli | District Hospital | 430 |
| 27 | Seth Baldev Das District Hospital, Saharanpur | District Hospital | 375 |
| 28 | 100 Saiyaa Combined Hospital, Hardoi | District Hospital | 347 |
| 29 | Divisional District Hospital Azamgarh - Blood Bank | District Hospital | 501 |
| 30 | UHM District Male Hospital, Kanpur Nagar | District Hospital | 249 |
| 31 | District Women Hospital, Prayagraj | District Hospital | 201 |
| 32 | 100 Beded Maurawa, Unnao | District Hospital | 312 |
| 33 | Uma Shanker Dixit District Women Hospital, Unnao | District Hospital | 201 |
| 34 | 100 Beded Bighapur, Unnao | District Hospital | 350 |
| 35 | Banda Hospital | District Hospital | 911 |
|  | Increase/ Decrease in project capacity | - | 203 |
|  | **GRAND TOTAL (in KW)** | **-** | **20,000** |

The total project cost is estimated to be **Rs.89.32 crore**. The main components of the project cost are:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Project Cost (Rs. crore)** | **Make** | **Cost** | **GST** | **Cost with GST** |
| Jakson EPC Package | Panasonic/ Hitachi | 34.95 | 13.80% | 78.74 |
| Pre-operative expenses (Consultancy Charges, Site Survey Charges, Employee Cost Overhead directly related to the project) | @ 8% of EPC cost | 6.30 | - | 6.30 |
| Preliminary charges (DSRA Upfront fee) | - | 4.06 | - | 4.06 |
| **Total Project Cost** | | | | **89.32** |
| **Means of Finance (Rs. crore)** | | | | **Cost with GST** |
| Equity | | | | 26.80 |
| Loan Amount | | | | 62.53 |
| **Total Means of Finance** | | | | **89.32** |

The Major components of the project cost[[2]](#footnote-2) are:

**1) Solar Panels (Panasonic)**

* The solar panels will be of Panasonic[[3]](#footnote-3) make and the model will be Anchor by Panasonic, 570-590 Wattp, 144 half-cell, N type, Topcon dual glass, bifacial solar module (AE14TXXXVHC16B5).
* The main features of the solar panels are as under:

| **Feature** | **Panasonic** |
| --- | --- |
| Type | Topcon N type bifacial module |
| Module Conversion Efficiency | 22.80% |
| Product Warranty | 15 years |
| Performance Warranty | Power degradation 1.0 % in first year; <0.40% / year in 2-30 years. In 30th year, 87.4% power output assured. |
| Power Output Warranty | 30 years |
| Length | 2278 mm (approximately 90 inches) |
| Width | 1134 mm (approximately 45 inches) |
| Height | 30 mm (approximately 1.18 inches) |
| Weight | 32 kg |

A summary of the panel proposed to be used is as under:

* Solar panel capacity of 570-590 Wattp (Wp) represents the power output of the panel in watts peak (Wp), meaning the maximum power it can generate under standard test conditions (STC).
* The panel consists of 144 half-cut solar cells. Half-cut cells improve efficiency by reducing resistive losses and increasing durability compared to full-size cells.
* The solar cells use N-type silicon instead of the more common P-type. N-type cells generally have higher efficiency, better temperature performance, and longer lifespan since they are less prone to light-induced degradation (LID) and potential-induced degradation (PID).
* TOPCon (Tunnel Oxide Passivated Contact) technology is a high-efficiency solar cell technology that enhances electron flow, reducing recombination losses and improving overall panel efficiency. TOPCon panels typically have efficiencies above 22%, making them one of the leading technologies in the solar industry.
* The solar module has glass on both the front and rear sides instead of a traditional glass-front and plastic-backsheet design. This increases durability, fire resistance, and longevity, making it ideal for high temperature environments.
* As the solar panel is Bifacial, it can absorb sunlight from both the front and back sides, increasing energy yield. This works well in highly reflective environments (e.g., snowy, sandy, or highly reflective rooftops), potentially increasing energy generation by 10-30% compared to monofacial panels.

The proposed Bifacial TOPCon technology is considered superior to traditional monocrystalline solar panels used a few years back. The key advantages are as under:

* Higher Efficiency : TOPCon enhances electron flow and reduces energy losses, leading to higher efficiency (22-24%) compared to traditional monocrystalline panels (~18-21%). The passivation layer in TOPCon minimizes recombination losses, allowing more energy to be converted into electricity.
* Bifacial TOPCon panels generate electricity from both the front and back sides capturing sunlight reflected off the ground. This can increase energy output by 10-30%, depending on the surface reflectivity (albedo effect).
* TOPCon panels have a lower temperature coefficient (~0.30%/°C vs. -0.35% to -0.40%/°C for standard monocrystalline) leading to better temperature Coefficient providing more power in hot climate areas. These panels lose less power in hot conditions, making them ideal for high-temperature regions.
* N-type silicon in TOPCon panels resists Light-Induced Degradation (LID) and Potential-Induced Degradation (PID), common in traditional monocrystalline P-type panels leading to longer lifespan of panel and lower degradation levels (~0.3-0.4% per year) compared to standard monocrystalline (~0.5-0.6% per year).
* The dual glass durability provides better resistance to environmental factors like humidity, salt mist etc and fire safety.
* TOPcon solar modules generally offer longer warranties (typically 30-35 years) compared to traditional monocrystalline (~25 years).
* TOPCon panels perform \*\*better in low-light conditions\*\* (morning, evening, and cloudy weather) compared to standard monocrystalline panels, thanks to their superior passivation technology.

**2) Inverters** - Growatt is one of the reputed inverter manufacturers in Asia. The company has opted for multiple sizes of PV Solar Inverter capacities according to the site. Smaller sites need smaller capacity inverters and larger sites can make do with larger capacity inverters. The main features of the Growatt range are as under :

|  |  |
| --- | --- |
| Max Panel Capacity | Max panel capacity range of Growatt inverters :   * MAX 50KTL3 LV - 75 KW * MAX 60KTL3 LV - 90 KW * MAX 70KTL3 LV - 105 KW * MAX 80KTL3 LV - 120 KW |
| Max efficiency | 98.8-99.0% |
| Protections provided | * DC reverse polarity protection * DC switch * DC surge protection * Insulation resistance monitoring * Ground fault monitoring * AC short-circuit protection * Grid monitoring * String monitoring |
| Other features | * Weight : 82 kg * Operating temp range : -25 to 60 °C * Dimension : 860/600/300 mm * Display : LED/WIFI+APP * Warranty : 5 years/ 10 years |

Under the proposed means of finance, SBI loan of **Rs.62.53 crore** will be utilized primarily for making payment to Jakson group for purchase of modules, BOS, inverters, etc and for their EPC services. The promoter's contribution will be brought in the form of equity (already raised and present in the books) of **Rs.26.80 crore**. The promoters have already invested around Rs. 42.68 crore (as on 12-Feb-25) from their own funds on the projects. The Bank is requested to consider the amount already spent towards the equity of Rs.25.43 crore and reimburse the balance to the company. The details of the payments by the company to Jakson group till date are as under:

|  |  |
| --- | --- |
| **Name of vendor** | **Payment (Rs. crore)** |
| Jakson group | 42.68 |
| **Total** | **42.68** |

**4. Shareholding profile, Business details and Key Management**

**4.1 Majority Shareholder Details**

The company is majority owned by Mitsui & Co Ltd and Chubu Electric. Both companies are Japanese multinationals. Brief details about the majority shareholders are as under:

**About Mitsui & Co Limited**

* Mitsui & Co Limited is a global Industrial conglomerate present in 63 countries. It has interests in Minerals & metals, Energy, Infrastructure, Mobility, Shipping, Basic processing, iron and steel, food and IT.
* As on March 31, 2023, the company’s total assets were $115 billion, Revenues $107 billion and Profit after tax $8.4 billion.
* Global Credit Rating: S&P A (Long term) & A-1 (Short term)
* In India, Mitsui also has multiple investments. Major ones include JV with Renew Power (for Round-the-clock power), Punjab Renewable Energy (Biomass/ Waste to energy), Mahindra Susten (large scale power), Fortis Hospital (IHH), etc.
* Mitsui, which is one of the largest corporations of Japan, made strategic investments in OMC in 2017, 2019 and 2021. The details of the investment made by ~~Chubu~~ Mitsui in OMC for its **26.9%** share are as under:

|  |  |  |  |
| --- | --- | --- | --- |
| **Date of investment** | **Instrument Allotted** | **No of Instrument**  **allotted** | **Amount Invested**  **(In Rs. crores)** |
| 31-Aug-17 | Equity Shares | 140,397 | 53.24 |
| 24-Oct-19 | Equity Shares | 124,907 | 52.62 |
| 3-Aug-21 | CCPS | 151,133 | 40.76 |
| 10-Dec-21 | CCPS | 96,175 | 25.93 |
| **Total** | | | **172.55** |

**About Chubu Electric**

* Chubu is one of Japan’s largest power companies. Its total generating capacity is around 9 GW with 5.5 GW of Hydroelectric assets and 3.6 GW of nuclear energy power plants. As on March 31, 2023[[4]](#footnote-4), the company’s consolidated total revenues stood at around $264 billion and PAT of around $2 billion.
* Global Credit Rating: AA- (R&I, Japan’s largest credit rating agency)
* The details of the investment made by Chubu are as under:

|  |  |  |  |
| --- | --- | --- | --- |
| **Date of investment** | **Instrument Allotted** | **No of Instrument**  **allotted** | **Amount Invested**  **(in Rs. crores)** |
| 29-Sep-22 | Equity Shares | 2,61,913 | 145.64 |
| 29-Sep-22 | CCPS | 1,30,058 | 72.32 |
| 12-Nov-24 | CCPS | 3,03,902 | 170.00 |
| **Total** | | | **387.96** |

After the November 2024 investment, Chubu has become the largest shareholder in OMC with 36.5% of the equity on a fully diluted basis.

**4.2 Businesses Details**

OMC was founded on 11-Apr-2011[[5]](#footnote-5). The company was co-founded by Shri Rohit Chandra, Mr. Sushil Jiwarajka and Mr. Anil Raj and operates in the renewable energy domain. The major businesses of the company are :

* **Mobile Telecom Tower Solarisation** - Under this business, the company aims to replace the DG sets with a troika of Solar + Battery + DG sets. The main aim is to reduce the costs associated with diesel and replace the DG set usage as much as possible with solar + battery. OMC is tasked with Power management for the telecom tower sites. The company has to manage solar power, battery or DG back-up along with discom power such that the total operational expenses of the tower are minimal.
* **Minigrids -** Alongside the Telecom tower business OMC caters to providing small rural businesses with solar power along with batteries. Power is provided to rural households and small rural businesses using prepaid meters through a minigrid.
* **Solar Rooftop business** : Under this line of activity, the company has already set up 11.06 MW of solar rooftops for large govt hospitals and medical colleges. This business was started in 2023.
* EPC business : The company has targeted small businesses with a packaged solar solution. This business was started in 2023.

**4.3 Key Management**

The profiles of the key management personnel in the company are as under -

* **Rohit Chandra:** He is one of the co-founders and the current MD and CEO of the company. Shri Chandra has done BSc Engineering from Aligarh Muslim University (1981-86 batch). He holds vast experience in the telecom sector. Prior to founding OMC, he has worked in
  + Philips (1986-88)- As Product specialist in Data Communication,
  + Forbes (1988-96) - As Marketing Manager for Telcom measuring and testing equipment
  + Wandel & Golterman (1996-99) - As a country manager dealing in telecom testing equipment
  + Ericsson (1999-2004) - As EVP of the telecom sales
  + Aircel (2004-08) - As Executive Director and CEO of North and East zones
  + Telenor (2008-10) - As COO of India operations (2008-2010).
* **AEA Jameel :** He heads UP business for OMC. He has been with the company for more than 2.5 years. He has done BCom from University of Ranchi and an MBA from Assam Institute of Management. Previously he has worked in the following positions :
  + Sales Head, Aircel (2005-2009)
  + Senior Vice President - Circle head, Uninor (2009-2017)
  + Circle Head, Bihar, Airtel (2017-2019)
  + Founder/ Entrepreneur, 11 Crossings (HR Firm) (2019-2022)
* **Yukihiro Tsujiura (Mitsui)**: Mr. Tsujiura is the CFO of OMC. He is a Mitsui representative. He is a graduate of Keio University Japan and a Masters in decision science from Minerva University in the USA. His work experience is as under:
  + Mitsui & Co Ltd (2011-2013) - Worked in the Corporate center finance division at Tokyo.
  + Mitsui & Co Ltd (2013-2016) - Worked in Risk in Steel and minerals division at Tokyo
  + Mitsui & Co Ltd (2016-2018) - Worked in Business development at Tehran, Iran after the sanctions were discontinued in Iran. Took care of Medical equipment, FMCG and healthcare businesses
  + Mitsui & Co Ltd (2018-2022) - Worked as DGM in Infra projects division
  + OMC Power (2022 onwards - Worked as Business Controlled & currently as CFO
* **Pooja Raman:** Ms. Raman is the legal counsel and Investment lead at OMC. She is a law graduate of Amity University & has done her masters in International Business law from National University of Singapore. Her work experience is as under:
  + Raghu Nayyar & Associates (2010-11) — Advocate at the firm
  + Kochhar & Co (2011-13) - Advocate at the firm
  + OMC Power (2014 - till date)
* **Ganapathi Srinivasan:** Mr. Srinivasan heads the roll out of the solar rooftop business and takes care of the new business acquisition. He has been with OMC for almost 14 years and previously worked in the telecom industry (Uninor, Maxis, Aircel etc). He has done BA Economics from University of Madras (1986-89 batch).

**5.0 Brief write up on the industry/Sector**

A snapshot of the Indian power sector from 2019-20 to 2023-24 is shared below-

| **FY (Apr to Mar)** | **2019-20** | **2020-21** | **21-22** | **22-23** | **23-24** | **Source** |
| --- | --- | --- | --- | --- | --- | --- |
| Installed Capacity (MW) | 3,70,048 | 3,82,151 | 4,01,010 | 4,16,059 | 4,42,857 | CEA |
| Total Generation (BU) | 1,252.6 | 1,234 | 1,321 | 1,421 | 1,624 | CEA |
| Solar Installed Capacity (MW) | 34,812 | 40,085 | 53,996 | 66,780 | 81,814 | CEA |
| Capacity Growth rate | 23.5% | 15.1% | 34.7% | 23.7% | 22.5% | - |
| Solar Generation (BU) | 50.1 | 60.4 | 73.5 | 91.8 | 116.0 | CEA |
| Generation Growth rate | 28% | 20.6% | 21.7% | 24.9% | 26.4% | - |
| % of solar generation | 4.0% | 4.9% | 5.6% | 6.5% | 7.14% | - |

Some of the key takeaways from the table above are as under:

* India is the world's third largest producer and consumer of electricity. The national electric grid in India has an installed capacity of 443 GW as of 31 March 2024.
* Renewable power plants, excluding large hydroelectric plants, constitute around 30% of India's total installed capacity and solar contributes to around 16% of the total installed capacity.
* India’s power consumption is rising rapidly except for the covid related shocks. During the 2023-24 fiscal year, the gross electricity generated in India was 1,624 BU (Billion kWh), of which solar contributed to around 92 BU (billion units) or around 7.14% of the total supply.
* Solar base is expanding very rapidly and is displacing other forms. In FY 2023-24, solar capacity additions contributed to around 85% of total capacity additions.
* Despite the pandemic, Solar’s generation numbers have risen rapidly (1.6% in FY 2019-20 to 6.5% in FY 2023-24) and shall continue to rise rapidly in the near future (as the tendered capacities take shape).
* On an average, 1 GW of solar capacity is being added each month for the past 2-3 year.
* On an average, each month, around 1 billion units of additional power is being generated from solar in India. Solar is quickly becoming a preferred source of energy and till date billions of dollars of energy imports have been substituted. Further, as EVs displace petrol/ diesel cars the capacity additions will continue to happen in the near future.
* The gross electricity consumption in 2023-24 was around 1160 kWh per capita (assuming population of 1.40 billion). The annual per capita electricity consumption is very low compared to most other countries (USA 13098 kWh/ person, China 4906 kWh/ person) despite India having a low electricity tariff.
* While India now has a surplus power generation capacity but it still lacks in adequate distribution infrastructure. To address this, the Government of India launched a program called "Power for All" in 2016. The program was accomplished by December 2018 in providing the necessary infrastructure to ensure uninterrupted electricity supply to all households, industries, and commercial establishments.
* While, India’s electricity sector is still dominated by fossil fuels, in particular coal, the dependence is gradually coming down. Around a decade back, coal used to cater to around three-quarters of the country’s electricity. Now with renewables coming up at a rapid pace, coal accounts for around 50% (205 BU in FY 2022-23) of the total generation.
* The government's National Electricity Plan of 2018 states that the country does not need more non-renewable power plants in the utility sector until 2027, with the commissioning of around 50,025 MW coal-based power plants under construction and addition of 275,000 MW total renewable power capacity after the retirement of nearly 48,000 MW old coal-fired plants. It is expected that non-fossil fuels generation contribution is likely to be around 44.7% of the total gross electricity generation by the year 2029-30.

**10.1 Snapshot of Renewable Energy Industry Analysis in India**

India was ranked fourth in wind power, fifth in solar power and fourth in renewable power installed capacity as of 2024. India ranked third in EY Renewable Energy Country Attractive Index 2019. Installed renewable power generation capacity has increased at a fast pace over the past few years, posting a CAGR of around 20% in the last decade. Power generation from renewable energy sources in India reached 194 billion units (BU) in FY24.

As of Mar 31, 2024, the installed renewable energy capacity stood at 267 GW (Source: [www.cea.nic.in](http://www.cea.nic.in/)), the breakup of which is as follows:

|  |  |  |
| --- | --- | --- |
| **Renewable Source** | **Capacity MW** | **% Share** |
| Solar | 82,338 | 53% |
| Wind | 52,820 | 34% |
| Biomass/ Co-gen (Sugar) | 12,428 | 8% |
| Small Hydro | 6,214 | 4% |
| Waste to Energy | 1554 | 1% |
| TOTAL | 1,55,355 | 100% |

The Ministry of New and Renewable Energy, under the supervision of the Government of India, had outlined an action plan to achieve a total capacity of 60 GW from hydro power and 227 GW from other Renewable Energy Sources (RES) by March 2025; this includes 114 GW from solar power, 67 GW from wind power, 10 GW from biomass power and 5 GW from small hydro power. The Government plans to establish renewable energy capacity of 500 GW by 2030. This is proving to be the major thrust for the sector as the market players have enough incentive to move to clean source. The Government is aiming to achieve 225 GW of renewable energy capacity by 2025, much ahead of its target of 175 GW as per the Paris Agreement. Under Union Budget 2019-20, the Government allocated Rs. 4,272.16 crore (US$ 611.26 million) for grid-interactive renewable energy schemes and projects, and Rs. 3,004.90 crore (US$ 416.48 million) for the development of solar power projects, including grid interactive, off-grid and decentralized categories.

As India looks to meet its energy demand on its own, which is expected to reach 15,820 TWH by 2040, renewable energy is set to play an important role. By 2030, renewable sources are expected to help meet 40% of India’s power needs. India has been building a solar power plant in Rajasthan since 2019, which will be the world’s largest with a capacity of 2,255 MW. India plans to add 30 GW of renewable energy capacity along deserts on its western border of Gujarat and Rajasthan. India’s renewable energy space has become very attractive from investors’ perspective as it received FDI inflow of US$ 9.56 billion between April 2000 and June 2020.

**10.2 Solar Power**

The solar energy sector in India offers potentially enormous capacity, though little of this potential has so far been exploited. Solar radiation of about 5,000 trillion kWh per year is incident over India's land mass, with average daily solar power potential of 0.25 kWh/m2 of used land area with available commercially proven technologies.

Solar power plants require nearly 3-4 acres land per MW capacity, which is lesser than coal-fired power plants when life cycle coal mining, consumptive water storage and ash disposal areas are taken into account, and hydropower plants when the submergence area of the water reservoir is included. Building solar power plants on marginally productive lands offers the potential for solar electricity to replace all of India's fossil fuel energy requirements (natural gas, coal, lignite, nuclear fuels, and crude oil).

**10.3 Road Ahead**

The Government is committed to increased use of clean energy sources and is already undertaking various large-scale sustainable power projects and promoting green energy heavily. In addition, renewable energy has the potential to create many employment opportunities at all levels, especially in rural areas. The Ministry of New and Renewable Energy (MNRE) has set an ambitious target to set up renewable energy capacities to the tune of 225 GW by 2025, of which about 114 GW is planned for solar, 67 GW for wind and other for hydro and bio among other. India’s renewable energy sector is expected to attract investment worth US$ 80 billion in the next four y

**7.0 Banking Arrangement and Sharing Pattern**

* The firm currently has its banking arrangement with IREDA and SBI[[6]](#footnote-6). The main features of the banking limits taken by the company are as under:

| **Main T&C** | **IREDA** | **SBI** |
| --- | --- | --- |
| Sanctioned Limit | Rs.22 crore | Rs 40.60 crore |
| Sanction date | 28-Mar-22 | 10-Aug-23 and 6-Jan-25 |
| Outstanding as on 31.12.24 | Rs.14.55 crore | Rs.35.70 crore |
| Purpose | For capital expenditure for set up of 45 solar power plants (20 mini grids and 25 telecom towers) | Term loan I - For the installation of 5 MW solar rooftop projects in Govt colleges of Uttar Pradesh  Term loan II - For installation of 7.06 MW solar rooftop projects in Govt colleges of Uttar Pradesh |
| Repayment | Moratorium of 3 months and repayment in 28 quarterly instalments of Rs.0.79 crore each. Last repayment date is 31-Mar-2029. | Term loan I - Moratorium of 6 months and repayment in 174 monthly instalments. Last repayment date is 31- Aug -2038.  Term loan II - Repayment in 180 monthly installments. The last repayment date is 29- Feb -2040. No moratorium. |
| Rate of Interest | 11.50% (Fixed Rate) | Term loan I - 6-month MCLR + 85 bps  Term loan II - 6-month MCLR + 35 bps |
| Security | * FD of Rs.2.20 crore * Hypothecation of project assets and mortgage of leasehold rights | - First Charge on the entire cash Flows, current assets, receivables, book debts and revenues of the project of whatsoever nature and wherever arising, both present and future.  - DSRA of 3 months |
| Important conditions | * 2% prepayment penalty * 5% rebate on loan amount on implementation of 80% of project (Rs.1.10 crore) * DSRA equivalent to 22.5% of loan (Rs.5.06 crore) provided by KFW. To be utilised towards repayment of residual loan in the end. | NA |

* SMBC : The company has an unsecured facility of Rs.35 crore from SMBC. The same is proposed to be partly prepaid by June, 2025.
* Conduct of the accounts - Satisfactory
* Proposed arrangement - **Rs.62.53 crore** term loan from SBI for setting up 20 MW solar plant on the rooftop of Govt hospitals at UP.

**8. Proposal for Sanction / Approval / Confirmation**

**Proposal for Sanction**

* Sanction of Term loan of **Rs.62.53 crore** for setting up Grid connected rooftop solar project with a door-to-door tenor of 15 years including 6 months moratorium.
* Proposal Remark - There are few established market players like the sponsor firm in this field. The firm has a signed PPA with almost all reputed Government medical colleges in the state of UP. The company has proven technology to manage the work and has relevant experience of setting up numerous such projects. The promoters and management are having sufficient experience in the same line of activity.
* To Bank’s interest, the following will be stipulated as security:
  + Charge on all project assets of the firm pertaining to the 20 MW installations.
  + Charge on escrow account where all receivables from the 20 MW hospital will be routed through.
  + Debt service reserve of 3 month’s interest and principal

**9. Performance and Financial Indicators**

**9.1 Name of the auditor**

V Parekh & Associates, Chartered Accountants, Fort, Mumbai

**9.2 Comments on major financial parameters**

The brief financials of the firm are as under:

**9.2.1 Sales**

The total operating income of the company for the financial year 2022-23 amounts to Rs.35.87 crore (PY - Rs 19.90 crore). The company witnessed an increase of 80.25%. The revenue lines of the company comprise of following:

* + **Supply of power to rural villages through mini grids:** The company is focused on building the rural energy infrastructure through its minigrid sites where renewable energy plants across Uttar Pradesh are located. The company derives revenue of around Rs.6.16 crore (17% of its FY 23-24 revenues) from this line of activity. The company has a capacity of 3.53 MW in pure mini-grids and mixed mini-grids (with telecom towers), as on 30 September 2024. The aim is to provide rural households and businesses operating in the interiors to have access to electricity. The tariffs on such facilities range from Rs.35-40 per unit (kWh). Power is made available through simple contracts and is transmitted via prepaid meters. The client fills application forms for the same containing the details of the package selected and signed by the consumer and company.
  + **Telecom support services to companies like INDUS, ATC etc**. - The company derives around Rs.21.47 crore or 60% of its FY 2023-24 revenues from this line of activity. The company currently has a solar capacity of 9.06 MW, battery capacity of 30.21 MWh and a DG capacity of 9.39 MVA spread across 311 locations catering to pure telecom sites as on 30 September 2024. The company is responsible for providing full power management service (including solar panels, battery back-up & power storage using lithium-ion batteries and DG sets) for the telecom tower company. The company has two major contracts from Indus Towers (ICRA credit rating - AA+ dated 16 Feb 2024[[7]](#footnote-7)) and ATC Telecom Infra (CARE credit rating - AA- dated 16 Jan 2024[[8]](#footnote-8)). Both these contracts provide for power at around Rs.22-26 per unit using the above-mentioned resources. Such contracts have a PPA period of around 10 years.
  + **Power transmission for commercial and industrial purposes -** As an extension of the two businesses, the company has entered rooftop solar projects. The company has commissioned 11.06 MW solar rooftop projects across multiple govt colleges and hospitals in UP. Prominent projects include those at King George Medical University in Lucknow, Motilal Nehru Medical College, Allahabad (1 MW), Baba Raghav das Medical College, Gorakhpur (1 MW) etc. **The entire 11.06 MW has been funded using two term loans of SBI as mentioned earlier.** The company earned revenue of Rs.1.04 crore from these projects in FY 2023-24 and the same will increase to around Rs.7.63 crore in FY 2024-25.
  + **EPC Business -** The company has also entered the business of providing solar EPC services. In FY 2023-24, it achieved a turnover of Rs.5.52 crore in the segment. The company targets to achieve a pipeline of 1000 solar projects in the next 4-5 financial years.
  + **Other income** - OMC currently has a tie up Honda Motors, wherein it uses batteries from Honda to power some of the mingrids. The company achieved a turnover of Rs.1.25 crore from this tie-up in FY 2023-24. Additionally, it sold some Renewable Energy certificates from which it earned Rs.0.43 crore.

**9.2.2 Cost of Production**

The cost of production primarily includes the cost of running the various mini grids and the telecom tower site. The total cost of production for the financial year 2023-24 amounts to Rs. 21.53 crore (PY Rs 10.99 crore). The major heads of expenses are as under:

* + **Diesel** - The main expense for the company is the diesel expenses amounting to Rs.14.08 crore (PY Rs.8.7 crore) which constitutes 65% of the total cost of production. The diesel is consumed by the Telecom Towers and mini-grids for providing uninterrupted power to their clients. The increase in diesel cost is primarily due to the tower companies rolling out 5G services to the mobile telecom clients requiring increased energy consumption.
  + **Plant level manpower** - The plant level manpower is required for manning the mini grids and telecom power. The expense on head was Rs.2.04 crore in FY 2022-23 (PY Rs.1.79 crore). The expense increased on account of expansion of sites in the last financial year.
  + **Rent -** The remaining plant expenses for the FY 2022-23 included the rent incurred on plant sites and site maintenance expenses of around Rs.2.04 crore (PY Rs.1.82 crore)

**9.2.3 Finance Charges**

The finance charges and interest expenses incurred on the loans availed from SMBC, IREDA and RBL amounting Rs.6.67 crore for the FY 2022-23 and it was Rs.8.75 crore for the FY 2021-22. The interest expenses have decreased as the company reduced the facilities from SMBC, RBL and IREDA. The outstanding loans fell from Rs.41.64 crore in FY 2022-23 to Rs.39.65 crore in FY 2023-24.

In the current financial year, the company has already repaid the RBL facilities in entirety and has exited the relationship. Currently, the company has facilities from IREDA (O/s around Rs.14 crore) and SBI (around Rs.35 crore) only.

**9.2.4 Other Income**

The income of the company, other than operating revenue, is Rs.9.85 crores for FY 2023-24 and Rs.8.95 crore for FY 2022-23. The main heads of other income are as under;

* **Other income - FD Interest (Rs.7.37 crore - FY 2023-24)** - The company earned interest on bank deposits. As on 31-Mar-24, the company had deposits of Rs.61.67 crore (PY - Rs.179.15 crore).
* **Income from IREDA loan (Rs.6.05 crore - FY 2022-23)** - The company earned Rs.4.95 crore from KfW (the German development bank) providing 22.5% equivalent of DSRA on the loan from IREDA (Rs.22 crore) to OMC for development of mini grids for rural communities. This DSRA has already been funded by KfW and will ultimately be used for repayment of the last 22.5% of the loan. The same is mentioned as part of IREDA loan agreement dated 28-Mar-2022, General conditions, clause 6, page 20. A further amount of Rs.1.10 crore has been provided as subsidy by IREDA towards completion of at least 80% of the project. The same is mentioned as clause 1 of general conditions (page 20) of IREDA loan agreement dated 28-Mar-22.

**9.2.5 Depreciation**

The depreciation for the FY 2023-24 amounts to Rs.26.92 crore and it was Rs.25.07 crore in the FY 2022-23. This is due to the substantial increase in plant and machinery acquired amounting to Rs 61.98 crore during the FY 2023-24, deployed in a project commenced during the year.

**9.2.6 Other expenses (excluding Employee benefit expenses)**

The expenses other than production expenses amounts to Rs 8.62 crore for the FY 2022-23 and Rs 6.43 crore in FY 2021-22. Thus, there has been increase of 2.54 crore. The major factors for this are:

* + **Securities Issue expenses** **(Rs.1.80 crore - FY 2022-23)** - The item mainly comprises success fee of Rs.1.5 crore paid to KPMG as the arrangement fee for issue of the CCPS to Chubu group in FY 2022-23.
  + **Repair and Maintenance (Rs.0.89 crore - FY 2022-23)** - The amount was spent towards maintenance of plant and machinery and repairs in FY 2022-23, as the number of plants in operation have increased to 355 and the increased ageing of plants.
  + **Conveyance (Rs 0.96 crores - FY 2022-23)** - There was an increase in travelling expenses due to increased locations of the plants.
  + **Rates and Taxes (Rs.0.94 crore - FY 2022-23)** - Rates and Taxes comprises of GST disallowance as per GST, in which OMC must disallow the input based on the exempt and taxable turnover ratio.
  + **Project cost written off (Rs.1.40 crore FY 2021-22)** There was a project cost written off Rs 1.40 crore in the financial year 2021-22. The Company decided to expand its activity of setting up Minigrid renewable energy generation units to Jharkhand and spent amount on feasibility study, identifying sites and permission from government organization etc. The Company was not getting sufficient order for purchase of power, it was decided to abandon the Jharkhand project.

**9.2.7 Earnings after taxes**

The company has operating loss after taxes of Rs 25.62 crore during the FY 2022-23 in comparison of operating loss after taxes of Rs 4.02 crore during the FY 2021-22. The increase in operating losses is Rs 21.60 crore. The overall reason of the same in the financial statements can be ascertained mostly due to an increase in depreciation.

**Exceptional Items of FY 2021-22**

**Waiver of principal and interest on Rockefeller Foundation debentures (Rs.25.18 crore)** - Rockefeller foundation as part of its charitable efforts had extended a loan (rather than a grant) of around Rs.25 crore to OMC in Nov 2016. After the company established the mini grids in various communities, the loans were converted to grants and an amount of Rs. 22.3 crore of principal and Rs.2.88 crore of interest were waived off in FY 2021-22. The Exceptional Items for FY 2021-22 therefore had increased by around Rs.25.18 crore on account of the above change. The above mechanism is documented in the Debenture agreement entered into by Rockefeller and OMC[[9]](#footnote-9).

**10. Performance and Financial Indicators - Balance Sheet**

**10.1 Share capital**

The share capital of the company as on date is Rs 1.91 crore. The current shareholding pattern is as under :

| **Shareholders' Name** | **Non-Fully Diluted Basis** | | **Fully Diluted Basis** | | **Investor Type** |
| --- | --- | --- | --- | --- | --- |
| **No. of Shares** | **Percentage** | **No. of Shares** | **%** |  |
| OMC Televentures Pvt. Ltd. | 289,137 | 24.29% | 289,137 | 15.15% | Co-founders |
| Khattar Holdings Pte. Ltd. | 60,093 | 5.05% | 60,093 | 3.15% | Investors |
| Khattar Estates Pvt. Ltd. | 45,092 | 3.79% | 45,092 | 2.36% | Investors |
| Consortium Associates | 3,417 | 0.29% | 3,417 | 0.18% | Investors |
| Mrs. P K Tripathi | 33,566 | 2.82% | 33,566 | 1.76% | Investors |
| Mr. Murarilal Tulsyan | 4,000 | 0.34% | 4,000 | 0.21% | Investors |
| Cultivat 3 AB | 3,600 | 0.30% | 3,600 | 0.19% | Investors |
| Aurum Renewable Energy | 2,135 | 0.18% | 2,135 | 0.11% | Investors |
| Mr. Vallabh Bhanshali | 17,088 | 1.44% | 17,088 | 0.90% | Investor, Ex- Enam |
| The World We Want Foundation | 34,379 | 2.89% | 34,379 | 1.80% | Investors |
| Kirsten Poitras | 1,000 | 0.08% | 1,000 | 0.05% | Investors |
| Energy Investment Tech Pte Ltd | 169,793 | 14.26% | 169,793 | 8.90% | Singapore based RE Investor |
| Mitsui | 265,304 | 22.28% | 265,304 | 13.90% | Mitsui Group |
| Chubu Electric Power | 261,913 | 22.00% | 261,913 | 13.72% | Chubu Group |
| Energy Investment Tech Pte Ltd | 0.00 | 0.00% | 36,908 | 1.93% | Singapore based RE Investor |
| Mitsui (holding as CCPS) | 0.00 | 0.00% | 247,308 | 12.96% | Mitsui Group |
| Chubu Electric Power (holding as CCPS) | 0.00 | 0.00% | 433,960 | 22.74% | Chubu Group |
| **Total** | **1,190,517** | 100.00% | **1,908,693** | 100.00% |  |

The total combined ownership of Mitsui and Chubu is 63.31% of the entity upon considering both equity and CCPS.

The company received fresh investment of Rs.170 crore from Chubu in November 2024 and Rs.20.5 crore from Energy Investment Tech Pte Ltd in December 2024. Chubu Electric will support the OMC Power expansion of green energy production, storage, and distribution portfolio in rural India. The Mitsui group, one of the largest corporates in Japan made the strategic investments in OMC in 2017.

**10.2 Reserves and Surplus**

The following are included in the reserves and surplus:

* **Securities Premium (Rs.472 crore - FY 2023-24)**: The amount of securities premium at the end of FY 2023-24 is Rs 472 crore (PY same amount). In the current financial year 2024-25; 3,40,810 series D compulsory convertible preference shares were issued. The valuation of both issuances was at Rs.5561 per share. Thus, increase in securities premium comes to be:

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of shares issued during the FY 2022-23(A)** | **Par value of each share (B)** | **Securities Premium of each share issued (C)** | **Total securities premium during the year(A\*C)** |
| 340,810 | Rs 10 | Rs 5551 | Rs.190.5 crore |

* **P&L Surplus/ Déficit (Rs.212.85 crore FY 2023-24) -** in the statement of Profit and loss: The total amount of Profit and loss at the end of FY 2023-24 is Rs. 212.85 crores and at the end of FY 2022-23, it was Rs 168.02 crores. The increase is due to the loss of Rs.44.92 crore incurred during the FY 2023-24.

**10.3 Long term Borrowing**

The long-term borrowing was Rs.39.65 crore (current maturities - Rs.16.38 crore) in FY 2023-24. The long-term borrowing was obtained from IREDA, RBL, SMBC and Rockefeller foundation (in the form of Debentures). In the current year 2024-25 the sanction of SBI of long term loan amounting Rs.22.80 crore has been done for 7.06 MW solar rooftop projects in UP Hospitals (PY Rs.17.6 crore was sanctioned by SBI for 5 MW solar rooftop).

**10.4 Long term provisions**

The provisions mainly comprise -

* Provision for gratuity of Rs 0.64 crore in FY 2023-24 (PY Rs.0.76 crore).
* The provision for leave encashment stood at Rs.0.14 crore in FY 2023-24 (PY Rs.0.17 crore).

**10.5 Current Liabilities**

* Trade Payables: There has been a decrease in the trade creditors from Rs.3.13 crore in FY 2022-23 to Rs.3.04 crore in FY 2023-24.

**10.6 Assets**

* **Fixed Assets, Intangible Assets and Capital Work in Progress -** The company has sizeable fixed assets and is further proposing to install 50 MW solar rooftop projects for Uttar Pradesh New and Renewable Energy Development Agency and renewable energy plants and battery storage projects at various hospital locations. The below table shows the capacities by business as under 30 Sep 2025 :

| **Business (Units)** | **Sites (number)** | **Solar Cap (kWp)** | **Battery Cap (MWh)** | **DG Capacity**  **(KVA)** |
| --- | --- | --- | --- | --- |
|
| Pure Telecom Sites | 311 | 9,062.91 | 30.21 | 9,387.50 |
| *- Average telecom capacity/ site* |  | 29.14 | 0.1 | 30.18 |
| Mixed Sites (Telecom + Minigrid) | 58 | 2,676.30 | 8.4 | 3,227.50 |
| *- Average mixed-use cap / site* |  | 46.14 | 0.14 | 55.65 |
| Pure Minigrid | 40 | 854 | 2.4 | - |
| *-Average Minigrid cap / site* |  | 21.35 | 0.06 | - |
| **Total** | **409** | **12,593.21** | **41.01** | **12,615.00** |
| **Solar Rooftop** |  | **11.06 MW** |  |  |

* **Non-Current Investments:** The company has held a non-current investment in the form of unquoted equity shares amounting Rs 3.73 crores, in MIT OMC Power Management Company Limited, a 100% subsidiary of OMC Power Private Limited.
* **Trade Receivable:** The trade receivable at the end of FY 2023-24 is as under:

|  |  |
| --- | --- |
| **Trade Receivable** | **Amount (Rs. crore)** |
| Outstanding for a period exceeding six months from the date they are due for payment | 0.00 |
| **Other receivables** |  |
| Secured, considered good | **-** |
| Unsecured, considered good | 3.62 |
| Doubtful | **-** |
| **Total** | **3.62** |

* **Other current Assets:** The year wise comparison is as under:

The GST Receivable is on account of purchases made from vendors. The interest accrued relates to interest on Fixed deposits.

|  |  |  |
| --- | --- | --- |
| **Other current Assets (Rs. crore)** | **2022-23** | **2023-24** |
| GST Receivable | 16.65 | 20.03 |
| Unbilled Revenue | 0.90 | 1.06 |
| Interest Accrued/ Prepaid exp/ Misc | 1.48 | 1.40 |
| **Total** | **19.04** | **22.49** |

* Cash and Cash Equivalents: The detail of cash and cash equivalents at the end of financials year 2023-24 is as under:

|  |  |
| --- | --- |
| Cash and cash equivalent | 2023-24 (Rs. crore) |
| Balances with Banks: |  |
| On current Account | 5.72 |
| Bank Deposits with less than 3 months | 48.40 |
| Cash on Hand | 0.08 |
| Other bank balance: |  |
| Bank deposits more than 3 months and less than 12 months | 7.47 |
| **Total** | **61.67** |

The decrease in cash and cash equivalent is on account of usage of cash for creation of fresh fixed assets.

**10.7 Half yearly financials for H1 FY 2024-25**

| **HY 2024-25 Financials** | **Amount (Rs. crore)** | **Remarks** |
| --- | --- | --- |
| Operating Income | 23.40 | 30.5% increase over FY 23-24 |
| Non Operating Income | 2.58 | 48% reduction over FY 23-24 as cash is utilised for capex |
| **Total Income** | **25.98** | 14% increase over FY 23-24 |
| EBIDTA | 8.20 | Substantial improvement over loss of Rs.11.3 crore in FY 23-24 |
| Interest | 3.50 | - |
| Depreciation | 10.77 | - |
| PAT | -6.07 | Cash profit and EBIDTA positive |
| TNW | 254.35 | TNW to increase further with equity infusion of Rs.190 crore in Nov and Dec 2025 |
| Long term Bank Debt | 25.11 | Long term debt expanded by Rs.21.20 crore post disbursement of SBI term loan II. |
| Short term Bank Debt | 54.85 | - |
| Net fixed assets | 266.25 | Expected to increase substantially with current project and further 50 MW expected to be launched in FY 2025-26 |

**10.8 External Credit Rating**

* The company got its facilities rated by CARE Rating on 30-Dec-2024
* The company received an upgrade of credit rating from BB+ (Stable) to BBB- (Stable) from CARE Rating
* The rating rationale from CARE can be accessed at <https://www.careratings.com/upload/CompanyFiles/PR/202412121209_OMC_Power_Private_Limited.pdf>

**11. Power Purchase agreements**

| **Head** | **Description** |
| --- | --- |
| PPA Tenor | 25 years |
| Capacity | 20 MW across 35 locations |
| Tariff | Rs.4.85/ kWh |
| Guaranteed Generation | 15% CUF to be ensured |
| Payment Security | * Not Applicable |

* 100% of power generated will be consumed in-house.

**12. Major Offtaker Details - Hospital details**

The major hospitals and medical colleges are as under :

|  |  |
| --- | --- |
| **Maharaja Suhel Dev Autonomous State Medical College, Bahraich (1566 KW)**   * Also known as Government Medical College, Bahraich, * A full-fledged tertiary government Medical college and hospital. The college imparts the degree of Bachelor of Medicine and Surgery (MBBS). The yearly undergraduate student intake is 100. * The college spread over campus area of 10 acres. * The college is affiliated with Atal Bihari Vajpayee Medical University and is recognized by the National Medical Commission. |  |
| **Maharshi Vashishtha Autonomous State Medical College, Basti (1100 KW)**   * The college is affiliated with King George's Medical University and is recognized by the National Medical Commission. * The undergraduate student intake was 100 students in 2019. * Medical college spreads over 17 acres of land. |  |
| **District Hospital Gonda (1005 KW)**   * The hospital caters to Gonda and surrounding areas * The district is mostly agrarian focussed with large number of villages and towns dependent on the district hospital |  |
| **Dr. Sone Lal Patel Autonomous State Medical College, Pratapgarh (800 KW)**  **-** Also known as Government Medical College, Pratapgarh  - The college imparts the degree of Bachelor of Medicine and Surgery (MBBS). The yearly undergraduate student intake is 100.  - It spread over campus area of around 11.5 acres |  |

**13. Assessment of Fund based Limits - Term Loan**

Sanction of term loan of **Rs.62.53 crore** for setting up of 20 MW solar rooftop project for govt hospitals at Uttar Pradesh. The project will be financed with a door-to-door tenor of 15 years including moratorium of 6 months.

**14. Project Implementation & Disbursement Schedule**

* Location - 35 locations
* Land - Not required. Rooftop project
* Production factors / Technical Aspects- Conventional rooftop project
* Lender's Independent Engineer / Insurance Consultant / Legal Consultant - SBI Empannelled engineer (RK Associates)
* Marketing & Selling Arrangements- NA
* Any Other Factors - NA
* Utilities - NA
* Approvals and Clearances - CEIG approval to be obtained prior to COD
* Industrial License: Not Required
* Technical Collaboration Agreement: Not Required
* Import License for P&M: Not Required
* Approval from SEBI for Capital Issues: Not Required
* Clearances from PCB: Not Required
* Clearances from Municipalities: Not Required
* Clearances from Forest Department: Not Required
* Clearances from Local Bodies: Not Required
* Environmental Clearance: Not Required
* Implementation Schedule and Disbursement Schedule : Project to be fully commissioned by September 2025. Disbursement to commence in March 2025 and finish in June 2025.
* Disbursement schedule- Within 3 months from sanction

**15. Sensitivity Analysis**

The sensitivity analysis of the cash flows based on certain set events is as under:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sensitivity Scenario event** | **Projected**  **Avg DSCR** | **Projected  Min DSCR** | **Post Sensitivity  Avg DSCR** | **Post Sensitivity  Min DSCR** |
| 5% fall in PPA price | 1.57 | 1.27 | 1.48 | 1.20 |
| 5% increase in O&M expenses | 1.56 | 1.26 |
| 2% increase in Interest rate | 1.44 | 1.13 |

The project is estimated to generate profits even with   
- Reduction in PPA price of 5%

* Increase in O&M price by 5%, or
* An increase in rate of interest by 2%

**16. Overall viability and acceptability of the proposal**

OMC is part of Mitsui and Chubu group. The company is well funded and well acknowledged in its field. The SBI assistance will be secured by :

* A long term PPA for 25 years,
* Experienced promoters and a capable management team,
* Adequate contribution from promoters infused in project

The project is considered acceptable and viable.

**17. Financial Projections and Assumptions**

The following assumptions have been made in the projections :

| **Parameter** | **Value** | **Remarks** |
| --- | --- | --- |
| Project Capacity in KW | 20,000 | As per the PPA |
| Total Project Cost | Rs.89.32 crore | Total Project cost |
| Total Loan Amount | Rs.62.53 crore | 70% of project cost |
| Generation PLF (%) | 16.55% | Based on the location and the irradiation levels, PLF is calculated as per the PVSyst report (P90 level). |
| Annual Generation in First full Year (in kWh) | 28,703,670 | First full year projected generation based upon P90 in the PVsyst |
| Annual Degradation | 1% | Based on conservative estimate an annual reduction is expected of 1% |
| PPA Rate (Rs./ kWh) | 4.85 | Based on PPA with the 35 district hospitals and medical colleges |
| Loan Repayment period (years) | 14.5 | 174 monthly instalments of instalment of Rs.3,593,471 |
| Moratorium (Years) | 0.5 | That's the time taken for the project to start generating returns |
| O&M Expenses (Rs. lakh per annum per MW) | Rs.6 lakh per MW | The operation and maintenance expenses will take care of regular upkeep, cleaning, security and repairs |
| O&M Expense escalation | 3% | Normal increases in O&M expenses per annum |
| O&M GST | 18% | GST on O&M service |
| Rate of Interest | 9.25% | MCLR + pricing |
| DC to AC ratio | 1 | No change |
| Transmission & Auxiliary losses | 0% | Given that the facility is behind the meter and all generation will be consumed by the firm for its own operations |
| Rate of Depreciation | 4% | 4% depreciation - Straight line method (depreciating the solar asset over 25 years) |

Detailed project forecasts are attached herewith.

**18. Security**

* The loan will be secured by a first charge on all project assets valued at around Rs. 84.78 crores
* Charge on receivables from the 35 projects. All receivables will be channeled to an escrow account held with SBI.
* Further, a debt service reserve account covering principal & interest repayment for 1 quarter shall be maintained to ensure repayment of obligations to SBI.

**19. Production Factors / Technical Aspects :**

Solar Resource comparison (Month Wise) : Provided in the TEV report (Extract of the PV Syst reports).

**20. Risk Factors**

| **Risk Type** | **Mitigation** |
| --- | --- |
| Completion Risk | Mitsui and Chubu are world renowned names in Energy. Management has substantial experience of managing large scale projects, Mini grids, power management etc. |
| Financial Risk | Given that Chubu and Mitsui have pumped in substantial equity into the company, no financial risk is imminent. |
| Market Risk | The firm faces market risk in terms of the fluctuation of interest rates. The scenarios related to adverse movement of interest rates have been factored in the sensitivity analysis and the project cashflows are robust enough to withstand such risk. |
| Technology Risk | The technology for solar is established and the experience of the bank in financing multiple solar power plants has been satisfactory. The generation from the power plant is stable and fluctuates according to the weather in a predicable manner. Further the firm has obtained panels, inverters etc from reputed manufacturers. |
| Operating Risk | OMC has a long history of managing diverse types of solar projects and is adept at Operations and Maintenance and ensuring that projects generate high levels of power. |
| Political, Legal and Regulatory Risk | The long term experience of the promoters in the sector will enable the firm to manage political, legal and regulatory risk. |
| Refinancing Risk | The project is not financed by any bridge loans which shall require refinancing (besides the proposed one). Since the loan is long term in nature, refinance risk is not expected to rise. |
| Sector specific Risk | Solar is a breakthrough clean technology. It is expected to replace fossil fuel use and is expected to increase exponentially in the near future. We do not anticipate any negative impact on the sector in the near future. |

**21. Conclusion**

The major strengths of the proposal are as under –

* **Project being implemented for a reputed Govt Hospital**

Project is proposed to be set up for reputed medical colleges at Prayagraj, Lucknow, Gorakhpur etc. All the colleges are institutions of repute with strong budgetary support from Govt of UP and Govt of India.

* **Regular cashflows from reputed corporate**

The funding will be supported by the escrowing of the cashflows generated by power bill receipts from the respective hospitals.

* **Long term Power Purchase Agreement**

The PPA secures OMC over the long term at the same time assuring the 35 institutions an assured supply of power at a fixed rate over the next 25 years. The long term PPA assures confirmed offtake for the company and ensures healthy timely cashflows.

* **Safe long term reliable energy source**

Solar energy does not cause any pollution. The plant has a life of ~ 30 years with predictable supply of energy. The energy generation from PV systems is guaranteed for the long term by the manufacturer and is backed by performance warranties. The O&M expenses are quite minimal and are benchmarked across the industry.

* **Government support**

There is strong government support for the solar industry. India is a lead member of the International Solar Alliance and has globally committed to a net zero (nil carbon emissions) economy. Policies of procuring grid scale solar power is geared to help the gr and the developer in a smooth flow of the business.

* **Attractive financial returns**

The business has a fairly predictable cashflow and an attractive IRR and payback period.

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1. Annexure 4 - OMC Financial Statements and Balance Sheet [↑](#footnote-ref-1)
2. Annexure 17 - Proforma Invoice of Solar Panel and Inverter [↑](#footnote-ref-2)
3. Annexure 15 - Solar Panel Datasheets [↑](#footnote-ref-3)
4. Annexure 30 - Chubu Corporate Profile [↑](#footnote-ref-4)
5. Annexure 1 - Company KYC Documents - GST, PAN, MoA, AoA and CoI [↑](#footnote-ref-5)
6. Annexure 3- IREDA and SMBC sanction letters [↑](#footnote-ref-6)
7. Indus Towers Limited credit rating - <https://www.careratings.com/upload/CompanyFiles/PR/202401130151_ATC_Telecom_Infrastructure_Private_Limited.pdf> [↑](#footnote-ref-7)
8. ATC Telecom Infra credit rating - <https://www.careratings.com/upload/CompanyFiles/PR/202401130151_ATC_Telecom_Infrastructure_Private_Limited.pdf> [↑](#footnote-ref-8)
9. Annexure 31 - OMC - Rockefeller Debenture Agreement (Page no.3; clause no. 2.1 (i) Redemption and clause 2.4 interest) [↑](#footnote-ref-9)