2016

ICRA SYSTEM INTEGRATOR (Photovoltaic Technology) GRADING OF MIKA ENGINEERS

Report Submitted By

ICRA

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1 ICRA-MNRE Grading

ICRA has been mandated by Ministry of New and Renewable Energy (MNRE) to carry out accreditation for Renewable Energy Service Companies (RESCOs) and System Integrators (SIs). The grading methodology adopted by ICRA and the grading scale is detailed in subsequent sections.

1.1 Note on SI Grading

1.1.1 Background

The Jawaharlal Nehru Solar Mission (JNNSM) launched in January 2010 is a major initiative of the Government of India (GoI) and State Governments to promote ecologically sustainable growth while addressing India's energy security challenge. It will also constitute a major contribution by India to the global effort to meet the challenges of climate change.

The immediate aim of the Mission is to focus on setting up an enabling environment for solar technology penetration in the country both at a centralized and decentralized level. The Mission will adopt a 3 phase approach. The first phase (up to March 2013) will focus on promoting solar power systems to meet and supplement energy requirements for power, heating and cooling. Since the sector is in its nascent stage, and is characterized by a high dependence on imported technology, the GoI feels that significant interventions are required to reduce costs. Moreover, the key challenge would be to provide an enabling framework which would aim to support channel partners in efficient and effective development of this sector.

With an objective to make solar power projects commercially viable and workable on a sustainable basis, the mission envisages to provide capital and interest rate subsidies. Wide-scale and meaningful implementation of the mission would call for involvement of only credible channel partners, as their capability to provide technical support to project developers and execute projects in a timely manner would have an impact on the achievement of the mission's objectives.

In order to ensure that only the capable and well-meaning channel partners are allowed in the sector, Ministry of New and Renewable Energy (MNRE) has mandated that all such entities get an accreditation by reputed rating agencies engaged by the ministry.

ICRA's accreditation process would categorize the entities participating in the JNNSM into grades based on various parameters. The grading assigned would facilitate in identification of channel partners which have the capacity and capability to undertake such projects. This benchmarking exercise would not only act as a powerful tool for effective promotion of best-practices in the sector, but also ensure optimum and effective use of the subsidies, resulting in an increase in the number of solar power projects.

The grading process will also function as a tool to monitor performance capability over time, incentivize efficient players and at the same time penalize weaker performance. The grading will also enable the channel partners to showcase their capability in executing projects to various other stakeholders like lenders, customer, suppliers and community groups. The grading would also provide a tool for comparison of these channel partners on a rational, scientific framework and a commonly applicable scale. Further, in line with the objective of the mission, the grading process also envisages the participation of start-ups with requisite technical skills, and innovative entrepreneurs and accordingly factors in the parameters.

1.2 Grading Scale

ICRA's grading will reflect "The performance capability and financial strength of the channel partner to undertake solar power projects". The grading would be done for channel partners like Renewable Energy Service Providing Companies (RESCOs) and System Integrators (SIs).

The grading would be done on a 5x5 matrix (5x5). This matrix will assess the entity on two broad parameters; performance capability and financial strength. Performance capability will include aspects such as track record of the entity, the diversity of its product profile, customers' and suppliers' feedback on performance, as well as factors like technical competence, adequacy of manpower, and quality of management of the entity. Financial strength would assess the entities with respect to revenue generation, profitability, financial flexibility etc. The grading scale is given below:

		Financial Strength				
		Highest	**High**	**Moderate**	**Weak**	**Poor**
Performance Capability	**Highest**	SP 1A	SP 1B	SP 1C	SP 1D	SP 1E
	High	SP 2A	SP 2B	SP 2C	SP 2D	SP 2E
	Moderate	SP 3A	SP 3B	SP 3C	SP 3D	SP 3E
	Weak	SP 4A	SP 4B	SP 4C	SP 4D	SP 4E
	Poor	SP 5A	SP 5B	SP 5C	SP 5D	SP 5E

The grading will be valid for a period of two years for all entities.

1.3 Grading Methodology

Framework for Grading of System Integrators (SIs)

System Integrators (SIs) are entities which will be involved in the end-to-end execution of the entire project and will also be responsible for maintenance of the equipment/system. The parameters for the grading of system integrators are summarised in the table below:

	Performance Capability		Financial Strength
1	**Promoter Track Record**	**1**	**Sales**
a)	*Solar Capacity Installed*	**2**	**Return on capital employed (%)**
b)	*Promoters' relevant track record*	**3**	**Total Outside Liabilities/ Tangible Net worth**
c)	*Quality of second tier management team*	**4**	**Interest Coverage**
2	**Technical competence and Adequacy of Manpower**	**5**	**Net worth (Entity + Promoter)**
a) ***b)***	*Technical competence* *Adequacy of Manpower*	**6**	**Feedback of bankers on conduct of account and integrity**
3	**Quality of Supplier And Tie-Ups**	**7**	**Current Ratio**
a)	*Quality of suppliers*		
b)	*Supplier feedback*		
4	**Customer And O&M Network**		
a)	*Customer Feedback*		
b)	*O&M capabilities*		
Performance Capability Grading			**Financial Strength Grading**
ICRA Solar SI Grading			

Performance Capability Assessment

A brief description of the performance capability indicators are given below:

1. Promoter Track Record

a) Solar Capacity Installed – the track record of the entity in terms of solar capacity installed will reflect its capability in terms of size of projects executed and the ability of the management to effectively manage projects of various dimensions. As there is an upper limit of 100 Kwp per site for projects, smaller players are expected to participate and as such, players having experience of installing higher cumulative capacity will get a higher score.

b) Promoters' Track Record in Similar Business – the number of years of relevant experience of the promoters in a similar business will be factored into the assessment. Experience in similar business would enable promoters to have a better understanding of the sector. Further, aspects such as performance of group companies, gearing levels of group companies and risk appetite displayed by the promoters would also be taken into consideration.

c) Quality of second tier management – the ability of the second tier management to successfully execute projects will also be taken into consideration. In case part of the project execution is being sub-contracted, the quality of the sub-contractors, their track record and experience would be assessed. The ability of the management to arrange the necessary resources for successful implementation of the project would be critical.

2. Technical Competence and Adequacy of Manpower

a) Technical Competence - this is an important parameter in technology oriented business as knowledge or understanding of solar cells/collectors, panels and other components will be a pre-requisite to operate this complex technology. Since most of the SIs will also been taking up the O&M functions, therefore technical know-how will be a critical. Moreover, long term sustainability of entities would require introduction of new products and services and thus technical competence would serve as an important factor for determining management capability.

b) Adequacy of manpower - this parameter would assess the adequacy of manpower available to the entity as wells as its ability to reach out to customers. ICRA will assess not only the manpower that an entity possesses but also the quality of manpower. Quality of manpower would be important as personnel with diverse knowledge and experience would be required to undertake repair and upkeep of multiple equipments. The proportion and nature of work outsourced by the entity will be assessed to evaluate the quality and adequacy of the personnel. An entity which carries out most of the activities including design, installation and O&M using its own resources will be assessed more favorably as compared to an entity who would subcontract these activities to a third party.

3. Quality of Supplier And Tie-Ups

a) Quality of Suppliers – this parameter will assess the credentials of the supplier in terms of its operating history, track record of successful implementation of projects and customer profile. The quality of supplier is important as life span of key components will determine the operating costs and cost per unit of power generation.

b) Supplier Feedback - this parameter will focus on assessing the level of involvement between the entity and its supplier, delays in payment and length of relationship between the entity and its supplier. The assessment will also link the actual feedback with the payables as per the financial statements.

4. Customer and O&M Network

a) Customer Feedback - this parameter will focus on assessing the quality of service delivered to customers in terms of timeliness of service delivered and level of customer satisfaction, in case the entity has already completed a few projects. It will also reflect the length of relationship between the customer and the entity.

b) Operations and Maintenance Capability – after sales service play an important role in solar power projects. In order to determine the operation and maintenance (O&M) capability of the entity, the geographical spread of the O&M network that has been established and availability of qualified and trained manpower will be evaluated. In addition, the track record of renewal of annual maintenance contracts (AMCs) by clients will also be a reflection of the O&M capability of the entity. Some of the other aspects which to be evaluated under this parameter would be the AMC policy, turnaround times, geographical reach etc.

Financial Strength Assessment

ICRA will only consider audited financials of the entities for the purpose of assessing its financial strength. The various parameters used to assess financial strength are described in detail below -

1. **Sales -** For entities with a meaningful operating history, the quantum of sales provides an insight into the capability of the SI as well as the capacity to execute projects. A certain size also provides benefits in terms of attracting manpower, scale economies and financial flexibility. The quantum of sales and growth in sales is also a good indicator of amount of revenues that a business can generate in the future.

2. **Return on Capital Employed (ROCE) -** Return on capital employed indicates the returns generated by a company on the total capital employed in the business. The ratio comprehensively indicates the profitability generated by the business and how well the entity is run by its management. A consistently low ROCE reflects the company's poor viability over the long term.

3. **Total Outside Liabilities by Tangible Net worth -** the nature of an SI's business requires it to have very low fixed assets and most of the funding is towards managing the working capital. An analysis of the total outside liabilities (debt as well as current liabilities) to the tangible networth of the entity provides a good indicator of the overall indebtedness of the entity. The lower this ratio, the better the financial strength, since it gives the entity flexibility to take on additional liabilities to contract higher business volumes if required.

4. **Interest Coverage -** Interest coverage represents the extent of cushion that an entity has in meeting its interest obligations from surpluses generated from its business operations. This ratio is important as it reflects the ability of the entity to service its interest obligations in a timely manner. Entities with higher interest coverage ratios can absorb higher levels of adverse business conditions and have better financial strength.

5. **Net worth (Entity) -** Net worth or capital (in case of firms) reflects the promoters' funds deployed in the business. There is no fixed repayment or servicing obligation on these funds, which thus act as a cushion against adverse business conditions. As most of the SIs are expected to be present in this business for a relatively shorter time period, these entities are not likely to have high capital investment by promoters.

6. **Feedback from Bankers –** This will involve an assessment of the entities' relationship with the banker, timeliness of submission of various reports to banks, instances of overdrawn accounts or bounced cheques or any other irregularities. As bankers form an important source of information on the operations as well as quality of management of an entity, their feedback would provide important insights into the entity.

7. **Current Ratio -** The current ratio indicates a company's overall liquidity position. It becomes even more important for entities relying on short-term liabilities to fund their working capital. Hence, the current ratio will be good indicator of the financial health of the entity and its ability to take on incremental projects.

In case of companies that are recently established, substantial emphasis would be placed on promoter strength and their ability to infuse funds into the business, as required.

2 Rationale

ICRA has assigned an **'SP 3C'** grading[1] to Mika Engineers, indicating the '**Moderate Performance Capability**' and '**Moderate Financial Strength**' of the channel partner to undertake solar projects. The grading is valid for a period of two years from May 20, 2016 after which it will be kept under surveillance.

Grading Drivers	**Strengths** ▪ Promoters have long established experience in the electronic component industry and the illumination projects ▪ Being an approved vendor for Power Grid Corporation of India Limited and regular supplier to reputed customers such as Siemens India, BHEL and ABB Limited, increases their reliability ▪ Experienced technical team for their foray in solar space as system integrators ▪ Comfortable capital structure on account of limited reliance on external funding
	Risk Factors ▪ Limited track record in solar space ▪ Financial profile characterized by modest scale of operations, low profitability and stretched liquidity on account of high debtors ▪ Fragmented nature of the industry coupled with tender based contract awarding system leads to intense competition from a large number of players

Fact Sheet	**Year of Formation**	1986
	Office Address	'D'-101, Dheeraj Heritage Residency II, Shastri Nagar, Santacruz (W), Mumbai 400 054.
	Shareholding Pattern	Mr.Asgar Karimi - 50% Mr. Hussain Karimi- 50%
	Established in 1986, Mika Engineers (ME) is a partnership firm with a track record of three decades in the manufacturing of control panels. The firm later ventured into undertaking turn-key illumination projects in 1997 and has successfully executed various façade lighting, indoor, outdoor, sports, high-mast lighting and solar lighting projects. From designing to installation, the company undertakes all activities for illumination projects. The firm commenced work in the solar power domain as a system integrator in 2013, by undertaking the installation of solar CFL and LED streetlights for Bharat Heavy Electricals Limited, for the order received from Power Grid Corporation of India Limited. It is an approved vendor for lighting system by Power Grid Corporation of India Limited and has installed approximately 46KW of solar capacity till date since it ventured into the solar segment, with the installation of solar street lights and offgrid roof top solar systems for control rooms.	

[1] *The grading is for Solar PV*

SI Related Business – Moderate Performance Capability	• **Solar capacity installed and promoter track record:** Promoters have a long track record of over three decades in the manufacturing of control panels and undertaking illumination projects. This has helped the firm enter the solar segment as a system integrator in FY2013. ME has undertaken three solar power projects, with a total capacity of around 46KW, encompassing the installation of around 300 solar streetlights and roof top solar system for control rooms of PGCIL. The work was subcontracted by BHEL, Crompton Greaves and ABB Limited to ME. Further, the firm is also engaged in the manufacture of street light poles, charge controllers and drivers and solar invertors • **Technical competence and adequacy of manpower:** The management has vast experience in undertaking illumination projects, ensuring their technical competency. The firm is headed by Mr. Asgar Karimi with an experience of over three decades in the electrical and electronic domain. Ms. Vaishali Abhyankar, who heads the illumination segment, has a total experience of over 12 years. The second tier management has the ability to undertake most activities starting from designing to installation of solar streetlight. However, as a system integrator the firm has limited R&D capabilities and getting regulatory approvals for the project. The management is in the process of getting MNRE approval for its products and also working towards diversifying it solar product portfolio. The firm has a 12-member technical team who are engaged in bidding, designing and managing the commercial aspects of the project; forty workers and six staff members are responsible for manufacturing, including seven supervisors for on-site execution. • **Quality of suppliers and tie-ups:** The components used for the installation of a solar street light includes the solar panel (35% of the manufacturing cost), the battery (35% of the manufacturing cost), pole structure, luminaries (LED/CFL), and battery boxes (30% of the manufacturing cost). The concern sources solar panels primarily from Inso Solar Private Limited and Alpex Exports Private Limited and battery from distributors of Exide Industries Limited, HBL Power Systems Limited and Amara Raja Batteries Limited. The other raw materials, streetlight poles and charge controllers and drivers, are manufactured in-house by the entity. Being in the solar domain since 2013, it has been working with these suppliers since the beginning. • **Customer and O&M Network:** The firm has executed three projects for PGCIL, which were subcontracted by BHEL, ABB Limited and Crompton & Greaves to ME. The firm extends a warranty period, from 18 to 24 months but it has no operation and maintenance service centre. The maintenance team visits the customer site in the case of customer complaints.

Financial Strength – Moderate	Revenues	Rs. 9.27 Cr. in FY2015
	Return on Capital Employed (RoCE)	4.45%
	Total Outside Liabilities / Tangible Net Worth	1.08 times as on March 31, 2015
	Interest Coverage Ratio	2.06 times for FY2015
	Net-Worth	Rs 4.87 Cr. as on March 31, 2015
	Current Ratio	3.29 times as on March 31, 2015
	Relationship with Bankers	Satisfactory
	The overall financial profile of the company is Moderate	

3 Fact Sheet

Name of the Firm	**Mika Engineers**
Constitution	Partnership Concern
Year of Establishment	1986
Principal Area of Operation	Control Panel manufacturer and executing illumination projects
Office	'D'-101, Dheeraj Heritage Residency II, Shastri Nagar, Santacruz (W), Mumbai 400 054.
Bankers	Yes Bank
Statutory Auditors	Sanjay C. Shah & Associates
Equity Capital Account as on 31st March 2015	Rs .5.04 Crore
Shareholding Pattern	Mr.Asgar Karimi– 50% Mr. Hussain Karimi- 50%

4 Business Profile

Established in 1986, Mika Engineers (ME) is a partnership firm with a long track record of three decades in the manufacturing of control panels. The firm later ventured into undertaking turn-key illumination projects in the year 1997. The firm is managed by Mr. Azgar Karimi and Mr. Hussain Karimi. The firm later ventured into undertaking turn-key illumination projects in 1997 and has successfully executed various façade lighting, indoor, outdoor, sports, high-mast lighting and solar lighting projects. From designing to installation, the company undertakes all activities for illumination projects. The firm is an ISO 9001:2008 certified entity.

The concern commenced work in the solar power domain as a system integrator in 2013 by undertaking the installation of solar CFL and LED streetlights for Bharat Heavy Electricals Limited for the order received from for Power Grid Corporation of India Limited. The firm is an approved vendor for lighting system by Power Grid Corporation of India Limited. The firm undertakes in-house production of street light poles, charge controllers and drivers and solar invertors. The management is in the process of getting MNRE approval for its products. The firm has installed approximately 46KW of solar capacity till date since it ventured into the solar segment with the installation of solar street lights and off grid roof top solar systems for control rooms.

4.1 Infrastructure and Facility:

ME has a manufacturing facility at Shahapur, Maharashtra and undertakes the manufacturing of control panels, streetlight poles, charge controllers, solar invertors and other structural items in-house. The remaining requirement for solar projects viz. solar panels and batteries are sourced from outside. Assembling and installation of the products are undertaken by the entity at the project site.

4.2 Key Management Personnel

The details of management as well as second tier management team of ME are given below.

Management:

Name	Qualification	Designation	Experience (In years)
Mr. Asgar B Karimi	D.E.E	Partner and overall In-charge	37 years
Mr. Hussain Karimi	B.E (Civil)	CEO	3 years

Technical Team:

Name	Qualification	Designation	Experience
Ms. Vaishali Abhyankar	B.E	G.M.Overall Incharge-Illumination	12 years
Mr. Deepak Kumar Nayak	D.E.E	Tendering/ Design-Panel Divn.	6 years
Sumit Kumar	B.E	Design Engineer	4 years
D.K.Kapur	B.E	Manager- Construction	39 years
Saurabh Moharil	B.E	Lighting Design-Engineer	2 years
Ganpat Mhadlekar	D.E.E	Design Engineer	32 yrs

The firm has a 12-member technical team who are engaged in bidding, designing and managing the commercial aspects of the project; forty workers and six staff members are responsible for manufacturing, including seven supervisors for on-site execution. Ms. Vaishali Abhyankar, who heads the illumination segment, has a total experience of over 12 years.

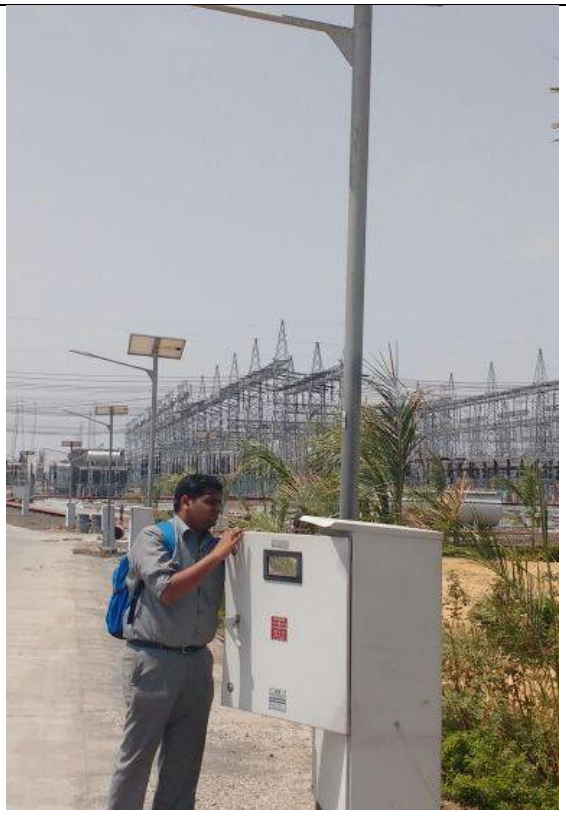
4.3 Product Profile

4.3.1 Solar PV Products:

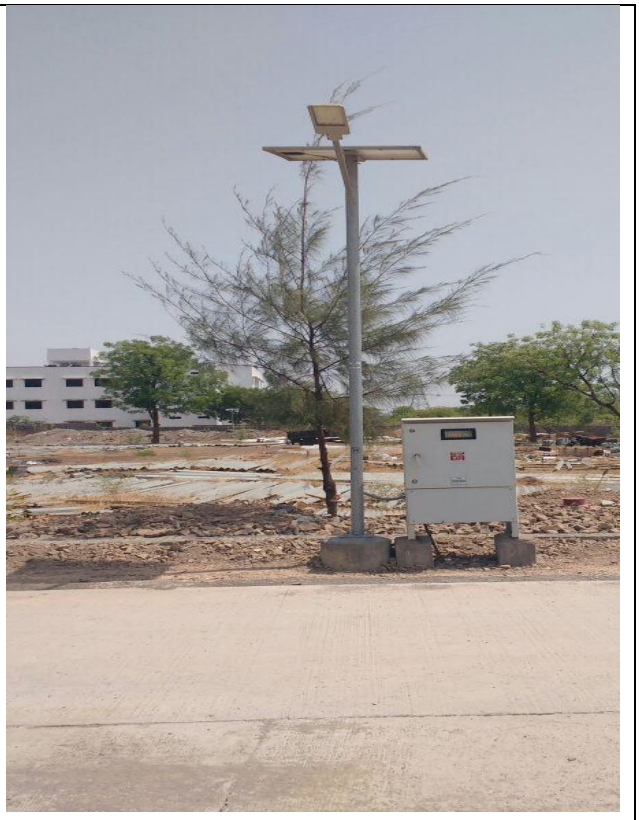
1. **Solar Street Lighting System:** ME has successfully executed three solar lighting projects in the past three years and one project is underway. The lights installed are dusk –to- dawn lights which are powered by a PV cell. These lights have a run time of 12 hours. A battery box is attached to the pole, along with the charge controller. The controller turns on the light when it detects no light from the solar panel and also activates the battery.

   The concern manufactures street light poles, charge controller and driver and solar invertors in-house, while remaining requirement namely, PV modules and batteries are purchased from manufacturers.

   A solar inverter converts the variable direct current (DC) output of a photovoltaic (PV) solar panel into a utility frequency alternating current (AC) that can be fed into an off-grid electrical network for working of street light



Site at PGCIL Substation, Aurangabad



Site at PGCIL Substation, Aurangabad

2. Off Grid Solar System:

Roof top solar system at PGCIL substation , Aurangabad

The firm has set up off-grid system by installing roof top solar system for control rooms at three locations. The system includes solar panels, solar inventors and batteries. The firm assessed the electricity requirement of the control room and accordingly design and install the system.

4.3.2 Solar Thermal Products:

The company does not produce any Solar Thermal products

4.4 Orders executed in the past and Order Book

The firm has one solar project in hand from BHEL, located in Haryana, amounting to Rs. 0.89 crore (inclusive of substation cost). The project is likely to get complete by June 2016. The scope of work includes supply and installation of 15 solar street light poles with 2.4KW of capacity and solar roof tops for control rooms. The firm has undertaken the entire illumination project for the customer.

The firm also has other orders in hand for control panel (amounting to Rs. 0.46 crore) and three non-solar illumination projects (amounting to Rs. 2.98 crore).

5 SI Services: Track Record Analysis

5.1 Solar Capacity Installed

The company has till date has installed approximately 46.5 KW of solar capacity. The details of the same are given below: Although, the firm has only executed three solar cases, the firm is engaged in execution illumination projects since 1989 which includes indoor, outdoor, sports and highmast lighting. A snapshot of major illumination projects undertaken by the firm for its reputed customers is provided below:

- Façade Lighting Project: Deutche Bank
- Indoor Lighting Project: Western Railways Commercial Building
- Outdoor Lighting:Executed projects for BHEL, ABB Limited, Kalpatru Power Transmission Limited, Crompton Greaves Limited, amongst others
- Sports Lighting: 5 and 3 Tennis grounds, Cricket stadium, Mumbai.
- Highmast Lighting: Air India Apron, C. Shivaji International Airport, Mumbai

The firm has also executed three solar projects since 2013. The details of the same are provided below:

Customer Name	Location	Project Description	Capacity	Value
PGCIL/Crompton Greaves	Raipur	Installation of 140 street lights and solar roof top for control room	22.4KW	0.69
ABB Limited/ PGCIL	Pondicherry	Installation of 10street lights and roof top for control rooms	5.5KW	0.041
BHEL/PGCIL	Aurangabad	Installation of 140 street lights and solar roof top for control room	20 KW	0.25

5.2 Promoters' Track Record in Similar Business

The promoters of the group have a long track record in similar lines of business as shown in the table below:

Name	Designation	Experience (In years)	Past Experience
Mr. Azgar Karimi	Partner	35	• Worked with Siemens India from 1979 to 1984 • Established ME in 1986 with commencement of control panel manufacturing • Started undertaking illumination turnkey projects from 1989 • Successfully executed over 50 illumination orders (including system supply as well as installation) in the past ten years
Mr. Hussain Karimi	Partner	3	• He has joined the firm three years ago. He is involved in commercial aspects of the project and responsible for site related activities.

One of the partners of ME has long track record in the manufacture of electronic equipments and has executed three projects in the solar space as a sub-contractor. The firm possesses the technical know-how to manufacture as well as assemble and install solar products; however, has not executed any solar project independently.

5.3 *Management Quality*

Name	Qualification	Designation	Experience
Ms. Vaishali Abhyankar	B.E	G.M.Overall Incharge-Illumination	12 years
Mr. Deepak Kumar Nayak	D.E.E	Tendering/ Design-Panel Divn.	6 years
Sumit Kumar	B.E	Design Engineer	4 years
D.K.Kapur	B.E	Manager- Construction	39 years
Saurabh Moharil	B.E	Lighting Design-Engineer	2 years
Ganpat Mhadlekar	D.E.E	Design Engineer	32 yrs

The illumination team is headed by Ms. Vaishali Abhyankar who is an Engineer in Electronics and is responsible for the successful execution of illumination project.

The second tier management has the ability to undertake solar streetlight designing as well as installations activities. The top management is supported by able operational team, who have ample experience in the electronic component business along with solar since 2013.

6 *Technical Expertise and O&M Network*

6.1 *Technical Competence*

The promoter group of ME have long track record in the manufacture of control panels and execution of illumination projects and have also executed three projects in solar domain. The firm has put in place experienced personnel for project execution. The second tier management has the ability to undertake all the activities starting from designing to installation of solar streetlight. As a system integrator they have limited R&D capabilities and getting regulatory approvals for the project. Nevertheless, the management is in the process of getting MNRE approval for its products and also working towards diversifying it solar product portfolio.

6.2 *Adequacy of manpower*

ME has an adequate manpower to handle all operations including design, assembly and installations. The firm handles the operations across the country and in-house technical team is responsible for the execution. Given the scale of operations at present the firm has ample bandwidth to expand range and number of service offerings. The firm has a 12-member technical team who are engaged in bidding, designing and managing the commercial aspects of the project; forty workers and six staff members are responsible for manufacturing, including seven supervisors for on-site execution.

7 Supplier Analysis

7.1 Quality of Suppliers:

Supplier	Product	Payment Terms	Relationship Since
Inso Solar Private Limited	PV Modules	Against Delivery	3 years
Alpex Exports Private Limited	PV Modules		3 years
Excide Industries Limited	Battery		3 years
HBL Power Systems Limited	Battery		3 years
Amara Raja Batteries Limited	Battery		3 years

The components used for the installation of a solar street light includes the solar panel (35% of the manufacturing cost), battery (35% of the manufacturing cost), pole structure, luminaries (LED/CFL), battery boxes, (30% of the manufacturing cost). The concern sources PV modules from Inso Solar Private Limited and Alpex Exports Private Limited and battery is procured from distributors of Excide Industries Limited, HBL Power Systems Limited and Amara Raja Batteries Limited. These are the preferred suppliers of the firm; however, the firm also procures from other suppliers.

The other raw materials consisting of the streetlight poles and charge controllers and drivers are manufactured in-house by the entity.

7.2 Supplier Feedback:

As per feedback from the supplier, they are satisfied with the involvement, information flow, payments etc.

8 Customers Analysis

8.1 Customer Analysis & Feedback

As per the feedback from the customer, they are satisfied with the quality and timeliness of installations, maintenance, services.

8.2 Operations and Maintenance Capability

The firm does not provide O&M services. However, the firm has been engaged in executing illumination projects from past three decades, which ensures operations and maintenance capability, in case the agreement demands for it. The firm does not have its service stations at various locations; however, the firm extends warranty period of 18 to 24 months and visit the project site in case of any complaints from the customer.

9 Financial Risk Assessment

9.1 Firm's Financial Performance

9.1.1 Income and Profitability

(Rs. Crore)	FY2013	FY2014	FY2015
	Audited	Audited	Audited
No. of Months	12	12	12
Operating Income	7.75	7.83	9.27
% Growth	-	1%	18%
Cost of Sales	7.41	7.64	8.93
OPBDIT	0.34	0.19	0.35
PAT	0.24	0.01	0.12
OPBDIT / Operating Income	4.43%	2.38%	3.75%
PAT/ Operating Income	3.11%	0.09%	1.32%
ROCE	9.71%	2.03%	4.45%
RONW	10.69%	0.15%	2.64%

The operating income of the concern has remained fluctuating during the period under review on account of the nature of the operations. The firm acquires new orders through tendering, which is allocated based on L1 bidding. The turnover of the firm registered a y-o-y increase of 18% from Rs.7.83 crore in FY14 to Rs. 9.27 crore in FY15 on the back of increased order in hand. In FY16, the firm clocked an OI of Rs.8.02 crore.

Due to tender based contract awarding system, the profitability of the firm has remained under pressure. The OPM stood at 3.75% in FY15. The net profit margin has remained under pressure and stood at 1.32% in FY15 on account of increased finance expense.

9.1.2 Capitalization and Coverage Indicators

(Rs. Crore)	FY2013	FY2014	FY2015
	Audited	Audited	Audited
Net Worth	4.50	4.49	4.78
Total Debt	0.68	1.58	2.21
OPBDITA/Int & Finance Charges	30.90	1.74	2.06
Net Cash Accruals / Total Debt	49%	5%	8%
Gearing	0.15	0.35	0.46

- The total debt of Rs. 2.21 crore as on 31st March 2016 comprise Rs. 1.11 crore of CC limit, Rs. 1.11 crore of unsecured loans. The net worth of the firm has remained stagnant over the past three years. The total debt as on 31st March 2016 stood at Rs. 2.30 crore. As per the CA certificate furnished by the firm, the net worth of Mr. Asgar Karimi stands at Rs. 2.47 crore as on 31st March 2016.

9.1.3 Working Capital Intensity

	FY2013	FY2014	FY2015
	Audited	**Audited**	**Audited**
Debtors Days	165	190	199
Payable Days	172	189	156
Inventory Days	130	164	83
NWC/OI	53%	68%	66%
Cash/Bank Balance (Rs. Crore)	0.66	0.43	0.56
Current Ratio	2.49	2.45	3.29

The net working capital intensity of the concern has remained high during the period under review on account of high debtors and inventory levels. Although, the firm gets some comfort from extended credit period enjoyed by the firm, the net working capital intensity stood at 66% in FY15. Of the total cash balance of Rs. 0.56 crore, Rs. 0.14 crore is in form of fixed deposit.

The firm extends a credit period of 60-75 days for illumination projects and 60-90 days for control panels. The firm also enjoys a credit of 60-90 days from its suppliers. The payment to solar suppliers is made against delivery. The debtors are also high on account of funds retained by the customer in form retention money and performance guarantee. Besides, the firm bills, the customer after the project completion, which has resulted in high inventory levels.

10 Visit and Feedbacks

10.1 Site Visit

Site Address	**Power Grid Corporation of India, Aurangabad**
Child labor at Site	No
Locality	Industrial
Location Area	Power Grid Corporation of India Limited sub-station located in Village Chitte Pimpalgaon, Aurangabad
Site used as	Power Substation
Site Layout	Streetlights are positioned alongside the road and roof top installation on the terrace of the control room
Building Structure	Permanent
Sharing premises with other entities	No
Other Observations	None

10.2 *Customer Feedback*

Customer	BHEL, Aurangabad
Relationship	Over one decade
Delivery	One solar project
Delivery timeliness	Satisfied
Overall satisfaction	Satisfied
The customer is satisfied with the project execution. There has been no issue post completion of the project.	

Customer	BHEL, Bhopal
Relationship	Over one decade
Delivery	Number of illumination projects
Delivery timeliness	Satisfied
Overall satisfaction	Satisfied
The customer prefers Mika Engineers for its illumination projects. The firm has executed illumination projects for BHEL's hydro power projects. The management of ME is cooperative and responsive to issues raised by the customer, post completion of the project.	

Customer	Siemens India
Relationship	8 years
Delivery	Illumination projects
Delivery timeliness	Satisfied
Overall satisfaction	Satisfied
The customer is satisfied with the project execution of the firm. The customer is dealing with the firm over last 8 years and prefers Mika Engineers as one of the preferred party to design, supply and install illumination project.	

10.3 *Supplier Feedback*

Supplier Name	Alpex Exports Private Limited
Order timeliness	Depends on order flow
Delivery reliability	On time ; no issues
Payments	Against Delivery
Supplier Feedback	Satisfactory
Supplier has been associated with the firm from past three years. The payment is prompt and the supplier has not faced any issue with regards to the payment from ME.	

10.4 *Banker Feedback*

Mr. Kunal Kapadia, Assistant General Manager – Yes Bank

Limits	**Bank Guarantee- Rs.2.75 crore Overdraft – Rs. 2.00 crore (sublimit of BG) Letter of Credit-Rs. 2.75 crore (sublimit of BG)**
Years of Relationship	N.A
Debt Servicing	Timely
Timely submission of requested Documents	Yes
Comments	Satisfactory
Bankers Feedback:	The firm is regular in debt servicing. There has been no instance of revocation of BG or LC devolvement. Further, the firm meets the documentation and other requirements from the bank in a timely manner. The conduct of the account is satisfactory.

N.A: Not available