

A street lamp is positioned in the upper right corner, casting a beam of light downwards. The beam is composed of a dense stream of small, light-blue digital characters (0s and 1s) that form a conical shape as they descend. The background is a solid, vibrant blue.

# EESL Toolkit for Street Light Energy Efficiency

Create  
Clean  
Efficient Energy  
Efficient India





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New Delhi, Dated: 6.12.2013

### MESSAGE

Global thrust towards increased urbanisation requires municipal bodies to enhance their coverage scope, and quality of services including street light, solid waste management, sewage treatment and disposal, water pumping, etc. All these activities consume significant amount of energy and accounts for major proportion of revenue expenditure of municipalities. There is a vast scope for reducing this expenditure by adopting energy efficient technologies and maintenance of best practices.

Ministry of Urban Development has taken several measures to enhance the quality and scope of services offered by municipal bodies. This includes two advisories issued to the State Governments recently reiterating the importance of energy efficient and expanded street lighting system in the context of providing an environment of safety and security for all. Ministry has also suggested replacement of conventional street lights with LED street lights with intelligent management and control so as to reduce the energy use. It is generally believed that LED based street lighting has the potential to reduce energy use by as much as 55 to 60%, while at the same time enhancing the quality of lighting and reduction in the operations & maintenance costs. Ministry has encouraged the States and Municipalities to take up implementation of energy efficient street lighting.

I am very happy to note that Energy Efficiency Services Limited, a Public Sector entity under the Ministry of Power, in close association with Bureau of Energy Efficiency has come out with a Tool Kit for implementing streetlight energy efficiency. I am hopeful that the Tool Kit will be found useful by various stakeholders and would stimulate energy efficiency measures in street lighting sector.

(Sudhir Krishna)

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### MESSAGE

Energy is the prime mover of economic growth and is vital to the sustenance of a modern economy. Sustainable developments requires long term availability of energy from sources that are affordable, accessible and environmentally friendly. India ranks sixth in the world in total energy consumption at present and needs to accelerate the growth in energy sector to meet the growing demands of a vibrant economy. India being a net importer of energy with more than 25 percent of primary energy needs being met through imports, is conscious of taking measures that reduce the import dependence and enhance energy security.

Energy Security is an important issue for the government and several measures have been taken in this regard. While energy supply is being augmented at an accelerated pace to bridge the demand - supply gap, Government renewed its focus on energy efficiency to moderate the growth of energy demand without compromising on the level of services. BEE has been implementing several initiatives which has helped the country avoid additional generation capacity of over 10,000 MW in the XI Plan.

Municipalities are important thrust area of the energy efficiency programme that Ministry of Power and BEE has been promoting. The significant potential of savings in energy costs, while at the same time enhancing the quality of services, is possible by energy efficiency project implementation. Moreover, implementation through Energy Service Company model provides a transparent and efficient performance based mechanism to municipalities/Urban Local Bodies to implement energy efficiency projects without having to budget for the capital costs. It is the endeavour of the government to promote such delivery mechanisms which can be replicated.

I am happy to note that EESL has prepared a standardized business model and a set of documents including methodology for implementation of the municipal streetlight projects on Energy Service Company mode, Contract documents etc. as a part of the Tool Kit that has been prepared. I am sure this Tool Kit would go a long way in promoting implementation of streetlight project in various municipalities and would help in enhancing the functional and financial efficiencies.

  
(Pradeep K. Sinha)

Dated: 6th December, 2013



### **MESSAGE**

There is a significant untapped potential for energy efficiency in the country. The Energy Conservation Act 2001 was enacted to provide a conducive regulatory and policy framework to catalyze market based energy efficiency implementation. The Act empowers the Government to unveil a combination of regulatory and policy measure to help unlock the potential for energy efficiency. The potential investment in energy efficiency is estimated at Rs.74000 crores which would lead to avoided capacity addition of around 20,000 MW in the country.

Bureau of Energy Efficiency has undertaken several initiatives during the 11<sup>th</sup> and 12<sup>th</sup> Plan to stimulate implementation of energy efficiency in sectors like appliances, large industries, buildings, agriculture, etc. It has also taken steps to enhance capacity of Energy Management in the country. Energy efficiency through Municipal Demand Side Management has been a thrust area of BEE programmes since the beginning of the 11<sup>th</sup> Plan period. BEE funded preparation of Detailed Project Reports (DPR) for more than 130 Municipalities/Urban Local Bodies in the county and has also undertaken training and capacity building of municipal officers. The DPRs prepared have highlighted the fact that energy cost account for significant proportion of the total expenditure of the municipalities and the identified interventions in the DPR related to energy efficient streetlights, water pumping, sewage pumping as well as building could lead to significant savings of costs by the municipalities while at the same time improving the quality of service.

The efforts of BEE has had a positive an impact as is evident from the fact that several municipal corporations have initiated steps to improve energy efficiency in the identified sectors. BEE is fully committed to support these initiatives and has advised EESL, the public sector implementing arm under the Ministry of Power, to this effect. I am happy to know that EESL has developed a comprehensive Tool Kit for Street Light which provides a methodology that can be used by Municipalities/Urban Local Bodies to implement energy efficiency in the streetlight sector. I would like to compliment EESL for bringing out an important documentation which will go a long way in supporting the efforts of municipalities/Urban Local Bodies for promoting energy efficiency in the streetlight sector.

  
(Ajay Mathur)



# एनर्जी एफिशिएंसी सर्विसेज लिमिटेड

(भारत सरकार, विद्युत मंत्रालय के सार्वजनिक क्षेत्र के उपक्रम की संयुक्त उद्यम कंपनी)

## ENERGY EFFICIENCY SERVICES LIMITED

(A Joint Venture Company of PSUs of Ministry of Power, Govt. of India)

December, 2013

### FOREWORD

Energy Efficiency Services Limited is promoted by Ministry of Power, Government of India as a Joint Venture company of four Central Power Sector undertakings viz NTPC Ltd, PFC, REC and Power Grid. Energy Efficiency Services Limited (EESL) was set up to create and sustain markets for energy efficiency in the country. EESL works closely with the Bureau of Energy Efficiency (BEE) and is leading the market related activities of the National Mission for Enhanced Energy Efficiency (NMEEE), one of the 8 national missions under Prime Minister's National Action Plan on Climate Change. EESL has, taking note of the objectives for its creation, evolved a strategic approach to stimulate implementation of energy efficiency by assessing market conditions and the barriers by:

- Creating market access in public and private facilities through handholding, information dissemination, capacity building of facility owners
- Developing projects for various sectors addressing specific barriers and challenges
- Designing risk mitigation measures to address technical, financial and regulatory risks
- Enabling funding at reasonable rates for project implementation to attract private investment
- Aggregating projects to attract the most economical value for the facility owners
- Developing model templates of agreements, payment security, etc necessary for project implementation
- Disseminating best practices to stakeholders so that replication can occur
- Providing transaction support to facility owners to implement projects.

2. BEE led interventions in the Municipal sector during XI plan period in 269 Municipalities/Urban Local Bodies (ULBs) covering 15 states bring out the potential of reducing energy consumption of 711 million KWh annually, which is about 52% of the electricity consumption. The savings in terms of recurring costs is assessed at Rs. 345 crores annually and the investment required is about Rs. 2500 crores if all the 33.65 lakhs street lights are replaced by LED based fixtures. Use of LED technology could provide the most efficient outcome as it will allow highest efficiency gains from retrofits as well as additional energy savings due to optimised operational performance.

3. Several states have taken steps to implement energy efficiency in the street light sector through ESCO mode. Tenders were issued by many municipalities to select the ESCO for implementing the projects. However, implementation did not take place for a variety of reasons, in particular related to the problems with baseline, conditions of contract and availability of funds. EESL, taking note of the problems in setting accurate baselines, data inadequacy and challenges associated with monitoring and verification has evolved an annuity based model that could ensure the best available technology leading to overall cost saving to the Municipalities/ULBs.

4. The Tool Kit attempts to collate the best practices of project design, implementation arrangements, payments security mechanism, technical performance parameters and monitoring and verification protocols that could be replicated. EESL is committed to support the efforts of states in adopting energy efficiency measures and it is our sincere hope that the Tool Kit will be found useful. EESL will be happy to provide investment and transaction based service to Municipalities and ULBs in their effort to secure investments for energy efficiency in street light.

(Saurabh Kumar)  
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# Contents

1. Energy Efficiency Potential and Opportunity in Street Light	9
2. Template of Tripartite MoU	28
3. Template of RfP for “DPR Preparation/ Data Revalidation, Supply, Installation, Testing, Commissioning & Maintenance of LED Street Light Fixtures and Related Work	36
4. Template of Implementation Agreement	84
5. Template of Bank Guarantee	126



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# Energy Efficiency Potential and Opportunity in Street Light

## ABBREVIATIONS

ADB	-	Asian Development Bank
BEE	-	Bureau of Energy Efficiency
BIS	-	Bureau of Indian Standards
CAGR	-	Compound Annual Growth Rate
CEA	-	Central Electricity Authority
CMC	-	Centralized Monitoring Control
CRI	-	Color Rendering Index
DPR	-	Detailed Project Report
EE	-	Energy Efficiency
EESL	-	Energy Efficiency Services Limited
ESCO	-	Energy Service Company
HPSV	-	High Pressure Sodium Vapour
IRR	-	Internal Rate of Return
KWh	-	Kilo Watt per Hour
LED	-	Light Emitting Diode
MC	-	Municipal Corporation
MOU	-	Memorandum of Understanding
M&V	-	Monitoring and Verification
NLC	-	National Lighting Code
O&M	-	Operation and Maintenance
RfP	-	Request for Proposal
SBD	-	Standard Bidding Document
SLA	-	Service Level Agreement
THD	-	Total Harmonic Distortion
ULB	-	Urban Local Bodies

## TABLE OF CONTENTS

1.	Background	14
2.	BEE Interventions in Municipal Sector	15
3.	Advantage of using LED in Street Lighting	17
4.	LED Retrofit of Conventional Street Lights	17
5.	Recent Initiatives by States	18
6.	Barriers and Challenges	18
7.	EESL Methodology	20
	7.1 MOU between Municipality/EESL	20
	7.2 DPR Validation and Joint Verification:	20
	7.3 Technology Demonstration	20
	7.4 Determination of Annuity	21
	7.5 Technical Specifications	21
	7.6 Implementation Agreement	22
	7.7 Payment Security Mechanism	23
	7.8 Selection of Implementing Partner	23
8.	Comparison between EESL Methodology and shared savings approach	23
9.	Benefits to Municipalities	24
10.	Suggested Way Forward	26
11.	EESL Role	26

## Executive Summary

Energy efficiency initiatives are at the heart of national policies that are conceived to promote energy security, reduce energy consumption and tackle climate change. With public lighting consuming about 8500 MU of electricity in 2012-13, energy efficient street lighting is poised to deliver substantial energy savings to Urban Local Bodies. Necessarily, BEE led interventions in 269 ULBs across 15 states to develop energy efficiency opportunities in Municipal sector. It was reported that retrofitting the entire conventional streetlights with LEDs could result in potential annual savings of 4300 million KWh, which is about 50% of total energy consumed. Furthermore, the operational optimization could lead to an additional 15-20% energy savings.

Despite this potential, the progress in transition to energy efficient street lighting in the Municipalities and ULBs has been slow. While several states have taken steps to implement energy efficiency in the street light sector through ESCO mode, the actual implementation on the ground has been largely unsuccessful. This may be due to many factors including: inadequate baseline data, lack of performance contracts standards, and lack of access to finance by Municipalities.

The EESL Tool Kit for Street Light Energy Efficiency establishes a framework to remove such market barriers that impede implementation of efficient street lighting. EESL has developed this toolkit on the back of analyzing the practical situation in the municipalities, and experience gained through the implementation of its ongoing street lighting projects. The tool kit is conceived as a means to enable municipalities to easily navigate the project development and implementation process. It encompasses: an actionable methodology, financing mechanism, procurement specifications, best practices, and terms of references and standard templates for key contracts.

The toolkit presents EESL's innovative annuity based model that overcomes the failures in current methodology of shared savings, Key features of EESL's model are:

- 1. Payments not linked to energy bill:** Payments are based on initially demonstrated and agreed energy performance.
- 2. Saving Demonstration:** During DPR preparation the energy performance is demonstrated on sampling basis.
- 3. Service Level Agreement:** To ensure technical performance of high standards and free replacement warranties.
- 4. Payment Security:** Bank Guarantee to cover capital cost or state government guarantee
- 5. Repayment of Investment:** On fixed annuity paid by MC monthly or quarterly.

EESL's methodology for efficient street lighting benefits municipalities by reductions in energy and maintenance costs. The methodology is depicted in the figure below:

<b>MoU</b>	MoU to be signed between Municipalities & EESL
<b>DPR/Rd Validation of DPR</b>	Detailed walk through energy audit for data validation of existing DPR and Joint Verification
<b>Technology Demonstration</b>	Assess actual energy savings, determine annuity payments and finalize technical specifications
<b>Agreement</b>	Agreement to be signed between Municipalities & EESL for implementation.
<b>Payment Mechanism</b>	The payment security mechanism to be finalized
<b>Implementation</b>	EESL will implement the project based on own resources
<b>M &amp; V</b>	Deemed saving approach used

The methodology could be suitably accepted as a standard for implementing street lighting projects across states thus resulting in standardization of processes for comprehensibility, replicability and inter-operability. This will significantly reduce a project's cost and lag time.

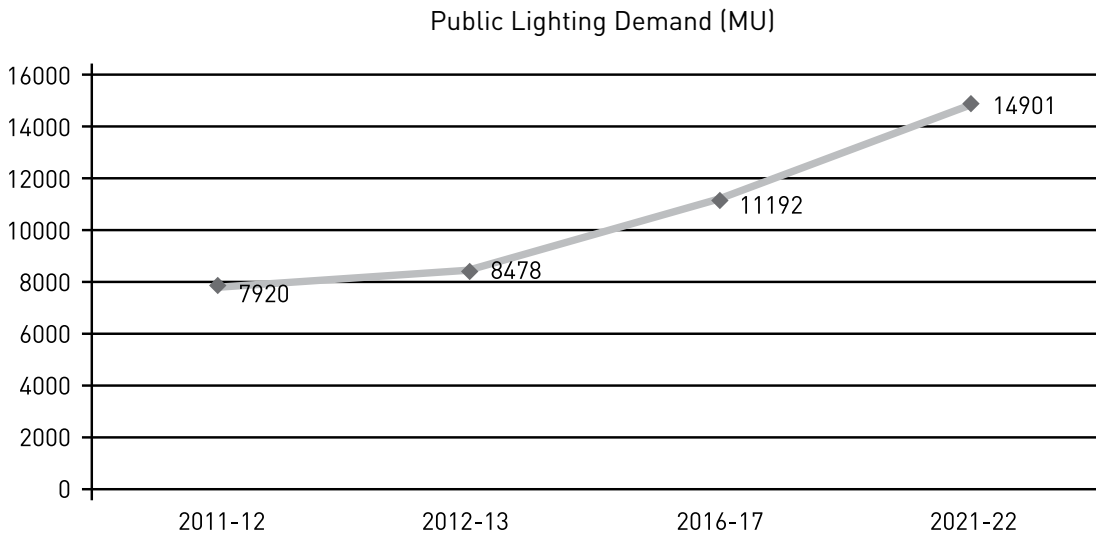
EESL could help increase the uptake of efficient street lighting programs at local and regional levels in two ways:

1. Provide comprehensive turnkey solution, by designing, implementing and monitoring the project using its own funds or
2. Provide transaction support to municipalities to develop and design projects, develop contract documents, provide project management service and undertake monitoring and verification

# Energy Efficiency Potential and Opportunity in Street Light

## 1. Background

As per the 18<sup>th</sup> Electric Power Survey of CEA, the estimated energy consumption in Indian public lighting sector with 2009-10 as the base year is about 8478 million KWh in 2012-13. The sector will grow at a CAGR of 7% during the XII and XIII plan periods. The chart below indicates this trend:



Source: 18<sup>th</sup> EPS, CEA

Street lighting sector thus has a significant potential of energy efficiency and cost savings. These energy savings can be harnessed by:

- (i) Reducing the installed capacity of lighting infrastructure by using more efficient products, and
- (ii) Optimizing street light operations by switching lights on/off in response to daylight availability

Use of efficient lighting infrastructure could help reduce the energy usage between 25-60%. For instance, retrofitting the entire conventional streetlights with LEDs could result in a potential annual savings of 4300 million KWh - which is about 50% of total energy consumed. In addition, the operational optimization such as use of twilight switching controls, dimming and voltage optimization, could lead to an additional energy savings of 15-20%. The total opportunity of energy savings at the national level, could increase from 4300 million KWh to about 5000 million KWh annually. Assuming a power cost of Rs. 5 per KWh, this translates to an annual cost savings of Rs. 2,500 crores.

## 2. BEE Interventions in Municipal Sector

During the last five-year plan, through detailed energy audits, BEE supported DPR development for 134 municipalities across the country. In addition, the BEE programme helped enhance the understanding of the opportunity among various Municipal Administrations. This enabled MCs to use DPRs and implement projects on ESCO mode at no budgeted investment. The accrued savings were expected to pay for the investments made by the ESCO. However, as indicated in section 5, the efforts of several municipalities to engage an ESCO as an implementing partner were not successful.

At the time of DPR preparation (2008-10), LEDs were disregarded as an alternative, because of high costs and lack of BIS standards. However, in the present scenario, the LED costs have reduced and BIS has issued standards, thus making LEDs as a viable alternative for street lighting applications. EESL thus has revisited the DPRs and has adjusted them to LEDs. The summary of adjustments is as under:

Name & No. of MC	Energy Consumption – MU	Energy Savings MU	Monetary Savings - in Cr	Investment - in Cr	Simple Pay-back – yrs.	Tariff - Rs./ kWh	No. of lights
<b>Andhra Pradesh (9);</b> Anantapur, Guntur, Hyderabad, Khammam, Kurnool, Mehaboobnagar, Nalgonda, Tirupati, Vishakapatnam	186.03	93.39	59.49	359.97	6.05	6.37	356162
<b>Assam (6);</b> Dehikiajuli, Dibrugarh, Jorhat, Rangapara, Rangia, Tinsukiya	1.04	0.47	0.22	1.90	8.63	4.70	4372
<b>Bihar (6);</b> Bhaglapur, Danapur, Katiyar, Munger, Muzaffarpur, Purnia	5.67	2.68	0.67	12.36	18.48	2.50	11129
<b>Chattisgarh (4);</b> Bhilai, Bilaspur, Durg, Raipur	22.28	12.40	3.53	32.43	9.18	2.85	54811
<b>Haryana (9);</b> Ambala, Bhiwani, Faridabad, Fatehabad, Gurgaon, Narnaul, Rohtak, Thanesar, Yamuna Nagar	26.26	13.86	6.86	45.87	6.68	4.95	54151
<b>Himachal Pradesh (4);</b> Dalhousie, Ghumarwin, Kangra, Shimla	1.35	0.72	0.29	2.01	7.00	4.00	5913
<b>Kerala (9);</b> Allaphey, Ambalappuzha, Cochin, Kasaragod, Kottayam, Malappuram, Palakkad, Trichur, Trivanduram	64.51	34.17	10.25	99.30	9.69	3.00	144515

<b>Maharashtra (10);</b> Jalgaon, Kalyan, Nagpur, Nanded, Nasik, Pimpri, Chincwad, Pune, Sangli, Solapur	209.26	102.75	34.94	428.25	12.26	5.00	401303
<b>Madhya Pradesh (13);</b> Bhopal, Burahanpur, Dewas, Gwalior, Jabalpur, Katni, Khandwa, Ratlam, Rewa, Sagar, Satna, Singroli, Ujjain	72.34	38.94	14.80	120.62	8.15	3.80	401303
<b>Punjab (6);</b> Amritsar, Bhatinda, Gurudaspur, Hoshiyarpur, Kapurthala, Patiala	3.99	1.88	1.05	8.28	7.91	5.56	116291
<b>Rajasthan (6);</b> Bikaner, Ganganagar, Hanumangarh, Jaipur, Jaisalmer, Nathdwara	58.50	29.10	14.26	105.85	7.42	4.90	182117
<b>Uttar Pradesh (11);</b> Aligarh, Allahabad, Barabanki, Ghaziabad, Jhansi, Kanpur, Lucknow, Meerut, Mirzapur, Sitapur, Varanasi	182.32	98.80	55.33	296.49	5.36	5.60	348332
<b>Uttarakhand (1);</b> Dehradun	9.01	4.01	1.58	21.16	13.36	3.95	23367
<b>West Bengal (17);</b> Aliduarpur, Asansol, Bhatpara, Cooch Behar, Darjeeling, Durgapur, Haldia, Hooghly Chinsurah, Howrah, Jalpaiguri, Kamarhati, Kharagpur, Kolkata, Maheshtala, Panihati, Rajpur Sonarpur, Siliguri	183.96	97.97	52.61	294.40	5.60	5.37	399457
<b>Gujarat - (159);</b>	353.42	180.24	89.22	637.93	7.15	4.95	862000
<b>Total (269)</b>	1,379.94	711.37	345.09	2,466.8	7.15		3,365,223

The table above indicates that in 269 ULBs, there is an opportunity of annually reducing the energy consumption by 711 million KWh, which is about 52% of the current consumption. The savings in terms of recurring costs to ULBs is Rs. 345 crores and the investment required is about Rs. 2500 crores. The simple payback for the investments is a little over 7 years. The other significant highlight that comes out, particularly from the standpoint of aggregation of demand is that there is a potential replacement of 33.65 lakhs streetlights. In case LED is promoted, the aggregated demand will not only spur domestic manufacturing, but will also drive down the costs making the projects more attractive. Use of LED technology could provide the most efficient outcome as LEDs will allow highest efficiency gains from retrofits and allow additional energy savings from optimized operational performance.



### 3. Advantage of using LED in Street Lighting

An energy efficient public lighting system brings very strong positive externalities for society as indicated below:

- (i) Reduction in energy consumption and costs: Modern LED based energy efficient lighting systems consume about 45%- 55% less energy than older and inefficient systems that are installed in almost the entire country. The resultant energy savings and the associated monetary savings provide a business model that could be leveraged to get third party financing. The lower running cost is a significant benefit for the State Governments, Discoms and ULBs, particularly for ULBs that are supported by state government budgets. Using third party financing could stimulate faster expansion of the lighting network and would ensure that the benefits of an energy efficient public street lighting system are spread beyond the urban areas.
- (ii) Optimizing Operational Performance: LED technology enables optimization of light sources at minimum intensity. It also can be integrated with centralized monitoring and control that turns off lights using a timer or sensor. CMC could help MC save additional two hours of power consumption that may otherwise be required for manual switching. Being directional light sources, LED also help in designs that enhance the quality of light output.
- (iii) Social benefits: LEDs not only improves safety conditions for vehicular traffic and pedestrians but also improve the safety and security of citizens, especially women.
- (iv) Reduced operation and maintenance cost: The life of such lighting systems is longer and requires less maintenance, thus reducing O&M costs.

### 4. LED Retrofit of Conventional Street Lights

EESL has reviewed the current baseline of the conventional lighting fixtures that are commonly installed on street light posts. They range from ordinary fluorescent lamps of 40 W with electro-mechanical choke to High Pressure Sodium Vapour (HPSV) lamp having rated capacity of 400 W. The table below indicates wattage that could provide same level of light output if LED technology is used and highlights their respective savings.

Present lighting system	Approx. equivalent upgrade system (LED/Control)	Potential saving in energy consumption
Fluorescent lamp TL 40W	LED 16W	61%
Sodium vapour 70W	LED 30W	61%
Sodium 150W	LED 60W	63%
Sodium/Metal halide 250W	LED 120W	56%
Sodium 400W	LED 240W	46%
Manual switching	Lighting control management system	10 – 25%

## 5. Recent Initiatives by States

As a result of BEE interventions and enhanced awareness among Municipalities on reducing energy costs, several states had taken steps to implement energy efficiency in the street light sector through ESCO mode. Many municipalities issued tenders in order to select the ESCO for implementing the projects. However, the actual implementation on the ground did not take place for a variety of reasons, in particular related to the problems with baseline and the conditions of the contract. These specific issues are elaborated in the following section. The list of unsuccessful cases is at Annexure-I.

## 6. Barriers and Challenges

EESL analyzed the reasons for non-performance of the ESCO delivery system despite of the cost-benefit and attractiveness. Conditions listed out in the tenders issued were analyzed to understand the reasons for the lack of project implementation. In all the cases, one of the key requirements of the bid was a minimum guarantee of energy and cost savings. While guaranteed or shared saving model is at the heart of ESCO business, its application requires certain pre-conditions to be fully met. The primary need is to have a baseline that is close to actual reality; adequate data on consumption patterns that could normalize the seasonal and other variations; and the equipment installed meet the required standards. If this is not the case, it is extremely difficult to deliver a guaranteed savings unless the pre-project baselines are reset. The practical situation in most municipalities is such that none of the three conditions were met nor were the baselines. As a result delivery of minimum savings couldn't be done. Thus, this increased the risk associated with the project, particularly as the payments were made contingent to the minimum savings achieved.

## 6.1 Some of the key reasons for the same are as follows:

- (i) **Baseline challenges:** Data availability in municipalities is extremely poor as a result there is significant variation between the actual number of lights, their consumption patterns and what is indicated in the bid documents. Data availability regarding functionality of streetlights is also not proper, as a result the data made available to the ESCOs is incorrect leading to inaccurate offer which cannot be implemented.
- (ii) **Inaccurate Billing:** Most of the RfPs issued require bidders to guarantee a minimum level of cost savings. However, in practice there is wide variation in the load that is indicated in the bid documents and the actual load. The variation at times is as much as 30-50%. Add to this, in several cases, in absence of metering, billing of streetlights is done on flat rate further complicating the matter.
- (iii) **Conforming of BIS Standards:** In most of the RfPs issued, requirement of meeting BIS/ National Lighting Standards at the street level was indicated. However, in majority of the cases, the current streetlights do not meet those standards nor any attempt was made to reset the baseline.
- (iv) **Detailed Monitoring and Verification:** The payment to ESCOs was contingent upon a detailed M&V plan leading to cost reduction. However, as explained earlier in the absence of clear baseline and the fact that operations of streetlights are manual, it is almost impossible for ESCO to carry out minimum savings to the municipal corporations.

6.2 In the recent past, some municipal corporations particularly 34 ULBs in Andhra Pradesh [bundled by AP Urban Infrastructure Development Corporation (AUIDC)] and Jaipur Municipal Corporation have issued RfPs. The RFPs address some of the challenges indicated above, there are still issue that have resulted in lack of interest amongst bidders, particularly in the case of AP where RFPs have been issued twice in last couple of years. The set of RfPs includes the requirement of minimum energy guarantee while leaving the choice of technology for retrofit to bidders.

6.3 While leaving the choice of technology open does provide the bidders some elbow room, it may lead to lock-in of technologies that are not the best. Because, in order to maximize their game while at the same time offering the best energy savings share (which RfP requires), it is unlikely that bidders will use LED technologies. This is because LEDs are costlier than other available technologies. This may end up as a sub-optimal outcome.

## 7. EESL Methodology

EESL has initiated the Street Lighting programme in a few states. It has commenced implementation of replacement of about 70,000 street lights with LEDs in Nashik Municipal Corporation. It is in advanced stage of initiating similar projects in 5 municipalities of West Bengal, 3 municipalities in Punjab, 2 municipalities in Andhra Pradesh and 1 in Puducherry. The estimated investments that EESL will make in these 11 municipalities are about Rs. 800-900 crores. The EESL has evolved an annuity based model that could ensure the best available technology to be retrofitted with an overall cost saving to the Municipal Corporations (MCs)/ ULBs. The model divorces the requirement of periodically demonstrating energy and cost savings to get the returns on investments. The cost saving is recovered from the combined expenditure of MC/ ULB on electricity bill and O&M charges. The details of the same areas under:

### 7.1 MOU between Municipality/EESL

EESL enters into MOU with the Municipality to provide a framework for implementation of energy efficiency measures in street light in the jurisdiction of MC. The implementation will be undertaken by EESL by investing the entire upfront capital cost of energy efficiency interventions, including preparation of Detailed Project Report. The investment of EESL will be recovered by payment of annual service charge by MC for the duration of the agreement. The actual annual payment of service charges and the duration of the contract will be determined after the completion of the Detailed Project Report by EESL. In some states, particularly where the state government is subsidizing power bills of municipalities, a tripartite MOU is being proposed.

### 7.2 DPR Validation and Joint Verification:

In all the 11 municipalities, DPRs are available, either through efforts of BEE, EESL (in case of Ludhiana) and ADB (for Kolkata). As these DPRs are 3-4 years old and they do not include LEDs as an option, the first task will be to re-validate the same. This will include physical verification of the number and type of existing fixtures on sample basis and including LED retrofits of equivalent lumen output. During the process, a joint team of EESL and MC will undertake verification of the number of street light and their rated wattage.

### 7.3 Technology Demonstration

Based on a designated demonstration area decided by the Municipality, EESL will retrofit energy efficiency technology. In case of street lights it would be LED street light as replacement of existing HPSV/Tube light etc. The actual consumption data will be collected and analysed with the baseline. The difference will be the savings agreed for the entire municipality. The services charge will be determined based on the demonstration savings, capital cost to be incurred by EESL, warranties that will be provided during the project period, O&M cost and a reasonable return on EESL investment.

### 7.3.1 The methodology for demonstration is as follows:

In the designated area decided by the Municipality street lights on the road will be replaced with LEDs. The following will be undertaken:

- (i) Determination of electrical parameter like voltage, power factor, harmonics etc. of the existing fixture in the designated area.
- (ii) Determination of lux output at road level as per specified methodology of National Lighting Code (NLC).
- (iii) Determination of lumen output of the existing fixture based on manufactures data.
- (iv) Replacement of LED fixture matching the lumen output of the existing and/or the lux level at the road.
- (v) The data of existing & new LED lights of the designated will be collected. The data will be such that it provides the consumption of electricity by existing fixture & that by LED fixtures. Energy saving will be recorded as the difference between the electricity consumption by existing and LED fixtures in the designated area

### 7.4 Determination of Annuity

The annuity to be paid to EESL will depend upon the following parameters:

- (i) Capital cost of interventions.
- (ii) Cost of capital of EESL (equity and debt to be invested at a ratio of 30:70).
- (iii) Energy savings validated as per the technology demonstration.
- (iv) Total savings to the municipality in terms of savings in electricity bill and O&M cost. For recovering energy cost, the current tariffs will be taken. The O&M charges incurred by municipality in the immediately preceding financial year will be taken.
- (v) Equity IRR of EESL (post-tax) of 16%.
- (vi) Project management charges will be limited to 2-4% of the capital cost of the project. A reasonable escalation to cover inflation will be added, but will be limited to 5% of the annual payments.

The annuity will be calculated based on the aforementioned in a manner that there is a net saving to the municipality due to reduction of electricity cost and O&M charges. The increase in monetary savings due to upward revision of electricity tariff will not be accounted for in the annuity model. This would be additional benefit to municipalities in future.

### 7.5 Technical Specifications

The LED street lights will conform to BIS standards. The minimum technical specifications will be as follows:

- (i) Powered by the latest bright LEDs with high efficiency and meeting LM-80 standard

- (ii) Average rated life span of 50000 hrs.
- (iii) LED efficiency shall be greater than 125 Lumens/watt
- (iv) Luminaries efficiency of at least 80 Lumens/watt
- (v) Input voltage range 90-300 V
- (vi) Power factor > 0.9
- (vii) THD < 15%
- (viii) Ingress protection as per IP 68
- (ix) Operating temperature -5°C to 50°C
- (x) Storage temperature -5° to 70°C
- (xi) Humidity 10% - 100%
- (xii) LEDs shall be operated at a forward current less than 90% of its rated current
- (xiii) The LEDs used in the luminaire shall have minimum angle of 120 degree
- (xiv) Color rendering index (CRI) of the LEDs shall be greater than 70
- (xv) Conform to Photo Biological Safety for the LEDs as per IEC 62471
- (xvi) Free replacement warranties of 5 years for technical defects

## 7.6 Implementation Agreement

After the demonstration of technology and determination of energy savings and annuity payouts, EESL will enter into an implementation agreement that inter-alia covers the following:

- (i) For the entire Contract Period the LED Street Lights supplied shall perform to the agreed standards as per LM-80 and L-70 standards as per BIS.
- (ii) Warranty to the products supplied under this agreement will be throughout the Contract Period (of BOT) covering any manufacturing defects.
- (iii) If the luminary fails to the agreed specification, EESL shall rectify or replace it in terms of warranty at its own cost throughout the Agreement Period –else its payments will be reduced proportionately
- (iv) EESL shall handover to Municipality up to 1% of the total quantity of lights in each sector and so as to use these lights as possible replacements for any defects that may arise.
- (v) EESL will ensure uptime of lights installed to be above 90% - failure to do so will lead to appropriate reduction in annuity
- (vi) EESL will install centralized monitoring and control to optimize operational efficiency.
- (vii) EESL shall have no responsibility for demonstrating power savings in the form of periodic power bills.
- (viii) The Municipality will pay the annual consideration in respect of the above supplies in every month as per the agreed schedule.

## 7.7 Payment Security Mechanism

In order to ensure that a robust payment security mechanism is in place, EESL has been working on 2 models:

- (i) Bank Guarantee from MC: EESL requires a Bank Guarantee covering the capital cost of the project to secure its investment.
- (ii) State Government Guarantee: In case MC is unable to provide the Bank Guarantee, a tripartite implementation Agreement/and or State Government Guarantee is required to secure investment.

In addition to the above, the implementation agreement has provisions for mitigating defaults by having ESCROW arrangements.

## 7.8 Selection of Implementing Partner

After the above steps are completed, EESL selects an implementing partner through an open competitive bidding process.

## 8. Comparison between EESL Methodology and shared savings approach

The following is a comparative table of EESL methodology as compared to the current RfPs that have come in the market:

Issue	Current Methodology (shared-savings)	EESL Methodology
DPR preparation / validation	Very detailed as the entire baseline, including energy consumption of lights and other anomalies need to be clearly ascertained. Normally would take 3-6 months to complete the process.	Only technology demonstration and validation of energy savings in a designated area. The resources and the time for the validation is much less in this case – usually about 1 month.
Technology for retrofit	Open to all technologies like T-5 / induction lighting / energy savers, etc. in addition to LEDs. However, in practice it may result in non-LED retrofits.	Only LEDs are being promoted for their higher efficiencies, long life and low maintenance.
Operation and Maintenance (O&M)	O&M expenses are usually in addition to the energy savings and are to be paid by MC to the successful bidder.	O&M is an integral part of the contract. Thus, MC not only gets the benefit of energy savings, but also of O&M cost savings.

Energy Savings guarantee and share of savings to MC	A minimum energy savings is mandatory in addition to savings share to MC. This may lead to lock in of efficient, though, not the most optimal technology (like installation of energy savers/T-5 etc.).	No minimum savings guarantee due to baseline and data availability challenges. The annual payout is such that there is an overall savings to MC in energy bills and O&M cost.
Revenue Risk	High as the payments are linked to minimum energy savings. In the absence of accurate data and baseline, difficult to achieve.	Low as the payments are not linked to determination of energy and cost savings. Savings are validated ex-ante based on LED technology and built into the annuity that MC pays.
Service Level Agreement (SLA) for performance	Not very well laid out – are subsumed in the energy savings and sharing of savings.	Very detailed SLA for technical performance including warranties for replacement, up-time of lights (>95%).
Centralized Monitoring & Control (CMC) for better operational performance	Not necessarily a requirement as technology choice is left open. CMC may not work with some technologies very efficiently to get operational efficiency through remote switching / dimming etc.	CMC is an integral part of the project. Higher operational efficiencies possible because of centralized switching on and off as well as dimming.
Payment Security	Bank Guarantee and ESCROW	Bank Guarantee / ESCROW / State Government Guarantees

## 9. Benefits to Municipalities

The methodology provides an overall cost savings to municipalities by reduction of energy cost and maintenance cost. The present energy bill and maintenance cost savings incurred by installations will be sufficient to pay for the annuity for LED installations and lower energy bills after installations. Thus municipalities will be able to get latest technology that has long life and very low maintenance at no additional cost. There is a possibility of achieving savings from the overall cost of the energy bill and maintenance even after paying for the annuity and the revised energy bill. Some of the examples to this effect are tabulated below:



### Repair & Maintenance Cost of other Municipalities

Sl. No.	Municipality	Present Electricity Cost INR in Lacs	Present O & M Cost INR in Lacs	Total (Before LED Retrofit) INR in Lacs	Annuity (Inclusive of O & M) INR in Lacs	Electricity Cost with LED INR in Lacs	Total (After Project) INR in Lacs	Monetary Savings annually INR in Lacs
1	Kolkata Municipal Corporation	8,754	1,944	10,697	7,405	2,398	9,802	895
2	Sangali Municipal Corporation	596	58	654	432	190	623	32
3	Sholapur Municipal Corporation	693	110	803	543	218	762	41
4	Nagpur Municipal Corporation	2,053	300	2,353	1,585	590	2,175	177
5	Ludhiana Municipal Corporation	3,235	240	3,475	2,273	982	3,255	220
6	Faridabad Municipal Corporation	767	37	804	519	253	773	31
7	Jabalpur Municipal Corporation	371	63	434	295	107	403	32
8	Trichur Municipal Corporation	417	26	443	288	123	411	32
9	Hyderabad Municipal Corporation	13,205	163	13,368	8,484	4,001	12,484	883
10	Bikaner Municipal Corporation	322	19	341	221	102	323	18

## 10. Suggested Way Forward

To begin with, the proposed methodology could be used to take up projects listed herein and selection of implementation partner may be done accordingly. Concurrently, BEE could take up the work of resetting the baseline in other municipalities. Once the baseline has been corrected, shared savings model, with a minimum saving guarantee, could be implemented. BEE could also, as a part of this exercise, standardize the following documents:

- (i) The Standard Bidding Documents (SBD) for selection of implementing partner on shared savings approach.
- (ii) Energy performance contract to be entered into by municipalities with competitively selected partner.
- (iii) Option for payment security.
- (iv) Monitoring and verification.

## 11. EESL Role

EESL could support the initiative of the municipalities in one of two ways:

- (i) Provide a turnkey solution form project development, implementation and O&M during the period of the contract; or
- (ii) Provide transactional/project management support to Municipalities to select an implementation partner following the above methodology.

### Annex-I

#### List of Unsuccessful Bids by States

Municipalities	Location	Estimated Cost (in Rs Crores)
Ludhiana Municipal Corporation	Ludhiana	70
Jaipur Municipal Corporation	Jaipur	80
Salem Municipal Corporation	Salem	10.5

Vellore municipal Corporation	Vellore	7.1
Coimbatore Municipal Corporation	Coimbatore	21
Madurai Municipal Corporation	Madurai	0.135
Nashik Municipal Corporation*	Nashik	70
Nagar Vikas Nyas	Bhiwadi	0.14
Badwani Municipal Corporation	Badwani M.P.	
Swagruha Municipal Corporation	Hyderabad	0.26
Vijayawada Municipal Corporation	Vijayawada	0.54
Gwalior Municipal Corporation	Gwalior	
Mysore Municipal corporation	Mysore	10
GUDC	169 ULBs	NA
Andhra Pradesh	34 ULBs	NA
WR	Vadodara	0.04
EPDCAPL	Vishakhapatnam	
NCL	Bina	0.071
RCFL	Mumbai	
IOCL	Orissa	0.13

\* Awarded jointly to EESL and Partner based on the methodology outlined

# 2.

## Template of Tripartite MoU

## TRIPARIATE MoU

— Between —

---

(State Government)

– And –

---

(Municipal Corporation)

– And –

---

(Service Provider/Bidder)

\_\_\_\_\_. (Area-Address)

## TABLE OF CONTENTS

Clause Title	Page
1. Definitions	31
2. Parties to the Memorandum	31
3. Background	31
4. Scope	32
5. Obligation of the Parties	32
6. Term	34
7. Procedure for Amendment, Cancellation, Arbitration and Exclusivity	34
8. Cooperation	34
9. Signature	35

## 1. DEFINITIONS

1.1 In this Memorandum the following expressions shall have the following meanings:

<u>Expression</u>	<u>Meaning</u>
“TPA”	Tripartite Agreement
“State Government”	..... (Name of State Government)
“MC”	..... (Name of Municipal Corporation)
“Service Provider/Bidder”	..... (Name of Service Provider/Bidder)

1.2 References to clauses are to clauses of this Agreement.

## 2. PARTIES TO THE MEMORANDUM

This TPA is between the following three parties:

## 3. BACKGROUND

State Government and the MC invited Service Provider/Bidder to undertake the supply of LED Street Lights giving output of lux levels equivalent to the existing lights, which shall include their installation, maintenance and warranty replacement during the project period on the principle of repayment of the cost of the project by the MC in .....monthly installments on the basis of cost reimbursement. In response thereto, Service Provider/Bidder has agreed to install the latest LED street light technology as replacements to the existing lights.

(i) The Government of ....., acting through its Representative \_\_\_\_\_ (hereinafter referred to as the “State Government” which expression shall, unless the context otherwise requires, include its administrators, successors and assigns) of First Part;

And

(ii) The Municipal Corporation having its office at \_\_\_\_\_, acting through its Representative \_\_\_\_\_ (hereinafter referred to as the “Municipality” which expression shall, unless the context otherwise requires, include its administrators, successors and assigns) of Second Part;

And

(iii) Service Provider/Bidder is a .....(Service Provider/Bidder description) of Third Part.

## 4. SCOPE

4.1 This Tripartite Agreement provides as a framework for implementation of energy efficiency measures in street light, water pumping and sewage pumping in the jurisdiction of MC. The implementation will be undertaken by SERVICE PROVIDER/BIDDER by investing the entire upfront capital cost of energy efficiency interventions, including preparation of Detailed Project Report. The investment of SERVICE PROVIDER/BIDDER would be recovered by payment of annual service charge by MC for the duration of the agreement. The actual annual payment of service charges and the duration of the contract will be determined after the completion of the Detailed Project Report by SERVICE PROVIDER/BIDDER. A separate agreement between STATE GOVERNMENT, MC and SERVICE PROVIDER/BIDDER will be signed consequent upon the finalization of the Detailed Project Report. SERVICE PROVIDER/BIDDER will commence the work of preparation of Detailed Project Report after this TPA is signed.

## 5. Obligations of the Parties

### 5.1 STATE GOVERNMENT

- (i) The STATE GOVERNMENT shall issue all necessary directions/guidance required for implementing the Project.
- (ii) Grant in timely manner all such approvals, permissions, authorizations which the "SERVICE PROVIDER/BIDDER" may require or is obliged to seek from STATE GOVERNMENT in connection with implementation of the Project and the performance of its obligations under this TPA.
- (iii) Grant or where appropriate provide necessary assistance to the "SERVICE PROVIDER/BIDDER" in securing applicable permits and exemptions.
- (iv) STATE GOVERNMENT will, on completion of Detailed Project Report, assist MC and SERVICE PROVIDER/BIDDER in finalizing the annual service charge and project duration after completion of Detailed Project Report by SERVICE PROVIDER/BIDDER.
- (v) STATE GOVERNMENT will ensure the signing of the Implementation Agreement between MC and SERVICE PROVIDER/BIDDER.
- (vi) In case of dispute or an ambiguity between the "SERVICE PROVIDER/BIDDER" and MC, the STATE GOVERNMENT shall have the obligation to resolve the dispute/ambiguity.
- (vii) STATE GOVERNMENT will assist MC and SERVICE PROVIDER/BIDDER to finalize payment security mechanism to ensure recovery of investment made by SERVICE PROVIDER/BIDDER.



## 5.2 MC

- (i) MC shall assist in getting permissions and exemptions as may be required under laws relating to it and regulating the Project as applicable in the State of ..... (NAME OF STATE). However the responsibility lies with the SERVICE PROVIDER/BIDDER of getting necessary permissions and exemptions
- (ii) MC shall ensure that from the date of this Agreement and till the completion of the project, the "SERVICE PROVIDER/BIDDER" has access to the Project Facilities for the purpose of carrying out the SERVICE PROVIDER/BIDDER's obligations under this Agreement.
- (iii) MC shall provide all necessary data, access to facilities and other measures that are expedient in preparation of Detailed Project Report by SERVICE PROVIDER/BIDDER.
- (iv) MC will designate an area where SERVICE PROVIDER/BIDDER will demonstrate the energy savings by replacement of existing street lights/pumps with energy efficient options. The demonstrated results will be used by SERVICE PROVIDER/BIDDER to work out the annual payment of service charges, project duration and payment security terms in a transparent manner.
- (v) MC provides an in-principle approval for payment of annual service charges consequent to the preparation of Detailed Project Report and calculation of the annual charges/project duration by SERVICE PROVIDER/BIDDER.

## 5.3 SERVICE PROVIDER/BIDDER

- (i) Carry out the Works strictly in accordance with the provisions of this Agreement.
- (ii) Undertake to achieve Detailed Project Report completion no later than 3 months from the date of signing this agreement.
- (iii) SERVICE PROVIDER/BIDDER will furnish to MC and STATE GOVERNMENT the Detailed Project Report, implementation Agreement and payment security terms within 15 days of completion of Detailed Project Report.
- (iv) SERVICE PROVIDER/BIDDER shall not seek any financial cost/assistance from STATE GOVERNMENT and/or MC for Detailed Project Report preparation.

## 6. TERM

This Memorandum commences on .....and will remain in force till ..... unless rescinded by either party. The Memorandum can be extended further by the mutual consent of both the Parties.

## 7. PROCEDURES FOR AMENDMENT, CANCELLATION, ARBITRATION AND EXCLUSIVITY

- 1.1 This Tripartite Agreement may be renegotiated if at any time during its term, the work or environment of the STATE GOVERNMENT, MC and SERVICE PROVIDER/BIDDER, is so altered that the contents of the Memorandum are no longer appropriate.
- 1.2 Pursuant to this framework agreement, separate implementation agreements will be negotiated between the Parties after completion of the Detailed Project Report.
- 1.3 This Memorandum embodies the entire understanding of the parties as to its subject matter and shall not be amended except in writing executed by all the Parties to this agreement. Any changes are to be recorded in writing and inserted or attached to this Tripartite Agreement and this will have the effect of updating the Tripartite Agreement.
- 1.4 In case of any dispute or difference arising between the Parties arising out or in relation to this Tripartite Agreement, the same shall be referred to STATE GOVERNMENT.

## 8. COOPERATION

- 8.1 STATE GOVERNMENT, MC and SERVICE PROVIDER/BIDDER will consult with each other, whenever it may be appropriate, on the matters covered by this TPA and will use their best endeavors to ensure that staffs of the organizations cooperate in good faith with one another.
- 8.2 All Parties should apprise / keep each other informed on project related matters. If any issue or dispute arises between STATE GOVERNMENT, MC and SERVICE PROVIDER/BIDDER, they will use their best endeavors to resolve the dispute promptly.

## 9. SIGNATURES

IN WITNESS WHEREOF, the Parties have entered into this Tripartite Agreement, the day and year as mentioned under Clause 6, above.,

### Witness

<p>1.</p> <p>Name</p> <p>Designation</p> <p>Executed for STATE GOVERNMENT By its duly Authorised Representative</p>	<p>2.</p> <p>Name</p> <p>Designation</p> <p>Executed for MC By its duly Authorised Representative</p>	<p>3.</p> <p>NWame</p> <p>Designation</p> <p>Executed for SERVICE PROVIDER/ BIDDER By its duly Authorised Representative</p>
-------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------

# 3.

Template of RfP for “DPR Preparation/ Data Revalidation, Supply, Installation, Testing, Commissioning & Maintenance of LED Street Light Fixtures and Related Work

(Logo & Name of Municipal Corporation along with Project Name)

## **Request for Proposal for**

“DPR Preparation/ Data Revalidation, Supply, Installation, Testing,  
Commissioning & Maintenance of LED Street Light Fixtures and Related  
Work at .....”

“Bid Package No: .....”

Prepared by

Name of Municipal Corporation

Address

# CONTENTS

<u>1.0</u>	<u>LETTER OF INVITATION</u>	40
<u>1.1</u>	<u>Introduction</u>	40
<u>2.0</u>	<u>BACKGROUND INFORMATION ABOUT MUNICIPAL CORPORATION</u>	41
<u>3.0</u>	<u>PROJECT OBJECTIVE</u>	41
<u>4.0</u>	<u>SCOPE OF WORK</u>	42
<u>5.0</u>	<u>QUALIFYING REQUIREMENTS</u>	46
<u>6.0</u>	<u>SELECTION PROCESS</u>	47
<u>6.1</u>	<u>Bidding Process</u>	47
<u>6.2</u>	<u>Evaluation of Proposals</u>	48
<u>7.0</u>	<u>INSTRUCTIONS TO THE BIDDERS</u>	49
<u>7.2</u>	<u>Technical Proposal</u>	50
<u>7.3</u>	<u>Financial Proposal</u>	50
<u>7.4</u>	<u>Deadline for Submission of Bids</u>	51
<u>7.5</u>	<u>Late Bids</u>	51
<u>7.6</u>	<u>Fees and Deposits</u>	51
<u>7.7</u>	<u>Bid Security (EMD)</u>	52
<u>7.8</u>	<u>Performance Security</u>	52
<u>7.9</u>	<u>Time table and Milestones</u>	53
<u>7.10</u>	<u>Opening of Technical Proposal</u>	53
<u>7.11</u>	<u>Opening of Financial Proposal</u>	54
<u>7.12</u>	<u>Validity of Terms of Bids</u>	54
<u>7.13</u>	<u>Language of the Bid</u>	54
<u>7.14</u>	<u>Signature of Bid</u>	54
<u>7.15</u>	<u>Other Instructions</u>	54
<u>7.16</u>	<u>Pre-bid conference</u>	55
<u>7.17</u>	<u>Enquiries:</u>	56

<u>8.0</u>	<u>FORMATS FOR SUBMISSION OF BIDS</u>	56
<u>9.0</u>	<u>CONFLICT OF INTEREST</u>	57
<u>10.0</u>	<u>CONFIDENTIALITY</u>	57
<u>11.0</u>	<u>DISCLAIMER</u>	57
<u>12.0</u>	<u>AUTHORIZED SIGNATORY (Agencies / Firms)</u>	57
<u>13.0</u>	<u>OUTSOURCING</u>	57
<u>14.0</u>	<u>AMENDMENT OF RFP</u>	57
<u>15.0</u>	<u>POWER OF ATTORNEY</u>	58
<u>16.0</u>	<u>FRAUD AND CORRUPTION</u>	58
<u>17.0</u>	<u>TERMS OF PAYMENT</u>	59
<u>18.0</u>	<u>LIQUIDATED DAMAGE</u>	59
<u>19.0</u>	<u>FORCE MAJEURE</u>	59
<u>20.0</u>	<u>TECHNICAL SPECIFICATIONS</u>	60
<u>21.0</u>	<u>BILL OF QUANTITY</u>	64
	<u>EXHIBIT 1: COVERING LETTER FOR TECHNICAL PROPOSAL</u>	64
	<u>EXHIBIT 2: LETTER OF COMMITMENT</u>	66
	<u>Attachment-3</u>	66
	<u>EXHIBIT 3: LETTER OF ACCEPTANCE OF IMPORTANT CONDITION</u>	68
	<u>Attachment -4</u>	69
	<u>EXHIBIT 4: INFORMATION REQUIREMENT FOR TECHNICAL PROPOSAL &amp; QUALIFYING REQUIREMENT</u>	71
	<u>EXHIBIT 5: COVERING LETTER FOR FINANCIAL PROPOSAL</u>	72
	<u>EXHIBIT 6: FORMATE FOR FINANCIAL PROPOSAL</u>	73
	<u>EXHIBIT 7: BANK GUARANTEE (BID SECURITY / EMD FORM)</u>	74
	<u>EXHIBIT 8: PERFORMANCE BANK GUARANTEE</u>	77

# 1.0 LETTER OF INVITATION

## 1.1 Introduction

This Request for Proposal (RfP) document is for “DPR Preparation/ Data Revalidation, Supply, Installation, Testing & Commissioning & Maintenance of LED Street Light Fixtures and Related Works at .....(Name of MC/ )” on fixed annuity services contract mode.

It is not surprising that electricity consumption in municipal sector is increasing steadily over the last few years. Municipal corporation must not only consider financial & resource security benefit through DSM measures, but also need to recognize impact on environment created by burning of fossil fuels. DSM measures have a key role in eliminating power shortage. There is need to address these issues on priority through integrated and comprehensive approach and by adopting latest techniques and technologies with active participation of all stakeholders.

Municipal bodies often lack sufficient institutional capacity to develop practical approach for maximizing efficiency, even after recognizing the potential benefits. Urban Local Bodies (ULBs) / MCs are trying to develop proper approach & proper model with the help of State Government to identify energy efficiency projects & implementation strategy for the efficient energy management in Municipal Corporation. The goal of energy management must be on provision of services like street lights with the least cost and least environmental effect.

The basic objective of the project is to improve the overall energy efficiency of the ULBs /MC which could lead to substantial savings in the electricity consumption, thereby resulting in cost reduction/savings for the ULBs. The major energy loads in a municipality are typically the water pumping systems, street lighting, sewage treatment and handling, and electricity distribution.

In order to take this concept forward and to measure the actual savings in power consumption & street lightings details, it is necessary to first revalidate available details of street lighting and established DPR & demonstration about committed energy saving, which is accepted by MC & it will be incorporate in further implementation service contract agreement. The scope of work & methodology of energy audit has given in the inside of RFP Document.

### Critical Information.

Availability of Bid Documents	From .....to .....
Pre-Bid Conference	10:30 hours on .....
Last date for receipt of bid	11:00 hours on .....
Time & Date of opening of bid	11:30 hours on .....
Place of opening of bid	Commissioner, Municipal Corporation Address of MC.
Contact Person for queries & submission of bid	Name & Contact Details of concerned person of MC
Contact E-mail I'd & Fax	



## 2.0 BACKGROUND INFORMATION ABOUT MUNICIPAL CORPORATION

### 3.0 PROJECT OBJECTIVE

The basic objective of the project is to improve the overall energy efficiency of the ULBs which could lead to substantial savings in the electricity consumption, thereby resulting in cost reduction/savings for the ULBs. The major energy loads in a municipality are typically the water pumping systems, street lighting, sewage treatment and handling, and electricity distribution.

The MC wants to replace the existing street lightings of MC with suitable LED fixture along with Central Control & Monitoring System per pole wise on fixed annuity service contract mode. The total invest are required for the data revalidation/DPR preparation & implementation of project along with R & M of the installed system up to the project period & other related expense is born by service provider/ selected bidder upfront & it is paid by MC as fixed amount annually to service provider/ selected bidder up to the contact period. Repayment assurance is to be provided by State Government or either MC through Bank Guarantee to cover capital investment and also payment security mechanism to assure annual repayment.

#### Overview of Existing Street Lighting

The major types of lamps of MC are Sodium Vapour / MH Lamps 70 W, 150W and 250W, 400W, FTLs 40W with copper choke & T5, Bulb 60W & 100W etc. The Average operating hours of the lamps are 11 hours (10 hours in summer & 12 hours in winter). The Street Lights control mechanisms of switching points are manually or automatic operated.

Energy consumption patterns for the ULB

- (i) Electricity is the only energy source of Municipal Corporation. Normally there are no dedicated feeders for street lighting.
- (ii) Some of lights are metered & some of not metered. So there is no direct measurement of electricity consumption by the municipality for street lighting.
- (iii) Some switch points are automatic & some of manually by switch or hook type arrangement.
- (iv) Street Lighting Inventory

Following are the available tentative street light details of MC, before going to implementation its need to verify by the bidder.

S. NO.	Lighting / Fixture Type	Wattage	Number
	Total		

Before bidding, Bidder should visit the Municipal Corporation through own cost for taking more details if required.

#### 4.0 SCOPE OF WORK

The scope of works has essentially consist of three parts,

- (i) Data revalidation or DPR preparation
- (ii) Replacement with LED fixture along with CCMS
- (iii) Repair & Maintenance of installed fixture up to project period.

#### Brief of scope of work are as follows,

- (i) Data revalidation or DPR preparation: Under this activity service provider/ Bidder has to revalidate the details of street lightings by walk through energy audit. Following are the steps for revalidation
- (a) Primary data collection: Bidder should collect the details of street light from Municipal Corporation like ward wise/feeder wise street lights details, category of lights, wattage of lights, pole heights, span length, arm or bracket details, electricity bill or consumption, metered & unmetered lighting details, working hours etc.

- (b) Secondary data collection:** Bidder should verify the above mentioned details through physical site survey along with deputed Municipal officials. The site survey will be on random sampling basis like one or two wards/ feeder wise but any case it should not more than the 2% of the total lightings or switch points. Sample size has also to be defined by the available tools. During secondary data collection bidder has to observe & measure the electrical parameter like voltage, current, PF, power consumption and also the variation in numbers of lamps. The obtain parameter has to be extrapolated for whole municipal corporation and accordingly the parameter, numbers & other details is to be fixed. It is to be verified by both Municipal & Bidders official.
- (c) Lux Measurement:** Performance of the lights is to be measured by lux measurement. The lux level will depend upon certain parameter like Road width, Pole to pole distance, Height of Pole, arm angel etc. in current condition all the parameter except Lamp wattage are fixed. It is difficult to match the actual BIS. So we require equal lumen output as compared to the existing lamp. So lux measurement is not important. So service Provider or Bidder has to take lux level of limited lamps only.
- (d) Demonstration:** The bidder /service provider has to demonstrate the energy saving during the data revalidation through replacement of existing lights with LED lights. For that they have to replace the existing lamp with LED & put a meter for a week & put energy meter in other end (existing Lamps). The difference between the power consumption will be the energy saving.
- In the designated area decided by the Municipality street light on one side of the road will be replaced with LEDs while the other side will remains as it is. For the replacements the following will be undertaken,
  - Determination of electrical parameter like voltage, power factor, harmonics etc. of the existing fixture in the designated area.
  - Determination of lux output at road level as per specified methodology of National Lighting Code (NLC).
  - Determination of lumen output of the existing fixture based on manufactures data.
  - Replacement of LED fixture matching the lumen output of the existing and/or the lux level at the road.
  - The data of both existing & new LED lights of the designated will be collected. The data will be such that it provides the consumption of electricity by existing fixture & that by LED fixtures.
  - Energy saving will be recorded as the difference between the electricity consumption by existing and LED fixtures in the designated area

- (e) Report Preparation: Based on the above findings service provider has to prepare report and suggest the suitable wattage of LED & other financial figures along with the Municipal officials.
- (ii) Replacement with LED fixture along with CCMS
- (a) Bidder has to submit the complete implementation plan along with the name of official and duties who has to be deputed in the site for execution of project & after execution maintain the R & M activities up to the project period.
- (b) Bidder should open the site office for smooth execution of the project.
- (c) Tripartite agreement has to be prepared based on the finding of data revalidation & is to be signed by service provider, MC & State Government After signing of agreement bidder has to start immediate replacement of conventional lamp with LED lamp along with Central control and Monitoring system. The supply installation testing commissioning all are to be performed by serviced provider for all luminaire. The LED luminaries will be equivalent lumen/watt as compare to new existing conventional lamp.
- (d) All the machineries & equipment is required for implementation of the project is to be arranged & expense is to be borne by bidders, MC has to provide only authorisation & necessary clearance & permission if required.
- (e) The additional related work like circuit wiring, pole replacement, etc. which are related to project execution will be attended by bidder on additional charge, if MC will request & authorise.
- (f) The quality of luminaries will be maintained by Bidder. They have to use only luminaries who has technically approved as per given technical specification in RfP document.
- (g) During project execution bidder has to follows the all necessary safety & security guidelines issued by MC or as per standard engineering practice for implementation.
- (iii) Repair & Maintenance of installed fixture up to project period.
- (a) The bidder has to take a responsibility of the repair & maintenance of all the installed new LED fixtures & system up to the project period. The fixture repairing will be done by free of cost. MC will not provide any manpower support for the above task.
- (b) The bidder should maintain spare stock which is 2% of the total lighting in the local site office for maintenance purpose.
- (c) Bidder should attained the failure/ problem of installed system within a specified time, any delay by bidder for attending the problems will be panelize by MC.

- (d) Bidder has to maintained necessary machineries & equipment in site which is required for maintenance activity.
- (e) The quality of spare or new fixture should as per earlier installed fixture or system.
- (f) Bidder should ready to take addition AMC as payable by MC after completion of project period.
- (g) After completion of project period bidder should ensure the availability of spare.

The following will be the time line for the above task:

Sl. No.	Activity	Time Period
1.	Completion of first phase Data revalidation & DPR preparation after award of Lol/ MoU	Within 45 days
2.	Installation of LED lights along with CCMS after removing old should complete after signing of agreement	Within 180 Days or specified in pre bid meeting
3.	Repair & Maintenance will be up to	project period

**General Requirements:**

- (i) Bidding agency should submit a Comprehensive Project Implementation Plan (CPIP) with deliverables according to the set timelines along with the technical bid as separate Annexure in terms of number of days.
- (ii) MC will monitor the project implementation to ensure its completion, in a Repair & Maintenance of installed fixture up to project period.
- (iii) Project Office: On award of project, bidding agency will need to open a local project office for the purpose of execution of the project.
- (iv) Bidder is to be ready to install the related work of street lighting system.

## 5.0 QUALIFYING REQUIREMENTS

Bidder must fulfill following minimum financial requirements:-

5.1 Bidder should be a manufacture of LED lights

5.2 The Bidder should have experience of supply of LED Lights with total project cost in last three years combined as follows:

Bidder should have supplied and installed LED lights and completed single order of Rs. -----  
--Lacs

Or

Bidder should have supplied and installed LED lights and completed two orders of Rs. -----  
----- lacs each

Or

Bidder should have supplied and installed LED lights and completed three orders of Rs. -----  
----- lacs each

5.3 Bidder should have annual average turnover of at least INR ----- Crores in the last three financial years (f/y 2010-11, 2011-12 and 2012-13) and should be profitable in at least any two of the last three financial years.

5.4 The Net Worth of the bidder as on the last day of the year 2013, shall not be less than 25% of the paid up share capital. The bidder must submit sufficient proof to substantiate the claim

(i) For the purposes of the above mentioned criteria, only audited annual reports shall be used. Bidders shall furnish documentary evidence duly certified by chartered accountants.

(ii) Copy of certificates of incorporation of the company to be enclosed.

(iii) Bidder shall submit PO copies/Invoices copies or supply and installation completion certificates from owners of LEDs lights in this regard.

## 6.0 SELECTION PROCESS

### 6.1 Bidding Process

#### 6.1.1 The bidding process would mainly consist of the following stages.

Issuance of RfP Document

Pre-bid conference

Issuance of revised RfP document/ any Amendment (if required)

Submission of the Technical and Financial Proposal

Bid Evaluation & Award of Lol

Signing of the Contract Agreement

#### 6.1.2 The RFP document shall be made available on the websites of MC ([www.-----](http://www.-----)). The bidding process shall be deemed to commence from the time of issue of the RFP document.

#### 6.1.3 A Pre-Bid Conference shall be held by MC on the date as indicated in the Time Table as per clause 7.9 the purpose of which shall be to address the concerns of the bidders with respect to RfP. In case of any change is required in the RfP document, the same will be issued as amendment.

#### 6.1.4 The bidders shall submit a Technical and Financial Proposal in response to the RfP document on the date as indicated in the Time Table mentioned in clause 7.9

#### 6.1.5 As a part of the Selection Process, Technical Proposal submitted by interested Bidders in response to RFP, shall be evaluated based on the methodology and evaluation criteria as detailed in the RfP. The Bidders are required to submit their Technical Proposal in the formats placed as Exhibit 1 to 4 of this document.

#### 6.1.6 The Financial Proposals of only technically qualified bidders shall be opened and evaluated based on the methodology and evaluation criteria as detailed in this bid document. The information required to be provided by the Bidders following stages.

Issuance of RfP Document

Pre-bid conference

Issuance of revised RfP document/ any Amendment (if required)

Submission of the Technical and Financial Proposal

Bid Evaluation & Award of Lol

Signing of the Contract Agreement

- 6.1.7 The final award of the Project shall be made by MC to the Bidder short-listed after evaluation of the Financial Proposal. Lowest evaluated, technically acceptable bidder for complete scope of work as defined at Para 4.0 will be awarded the contract
- 6.1.8 The selected Bidder shall be issued the Letter of Intent (LoI) / detailed letter of award by MC
- 6.1.9 The successful bidder will be required to enter contract agreement on stamp paper with MC

## 6.2 Evaluation of Proposals

Bidders should submit proposals in sealed envelopes as mentioned in chapter 7 instruction to the bidder. Initially, only the Technical Proposals will be opened at the date and time advised in the Bidding Document. The Price Proposals would remain sealed and held in custody by MC. The Technical Proposals would be evaluated by the bid evaluation committee. No amendments or changes to the Technical Proposals are permitted.

Following the approval of the technical evaluation, and at an address, date and time advised by the MC the Price Proposals will be opened. The Price Proposals would be evaluated and following the approval of the price evaluation, the Contract would be awarded to the bidder whose bid has been determined to be successful complying below.

In the event of any difference between the soft copy and the submitted hardcopy, hardcopy will be considered as final.

- 6.2.1 Preliminary Evaluation: Preliminary scrutiny of the proposal will be made to determine whether they are complete, required process fee has been furnished, the documents have been properly signed, and the bids are generally in order. Proposals not conforming to such preliminary requirements will be prima facie rejected. The technical proposals will be reviewed for deviations, acceptance of terms and conditions, adherence to scope of work, formats required, etc., In case of noncompliance on any of the above, bids will be considered as technically non-responsive.
- 6.2.2 Techno-commercial Evaluation: The techno commercial evaluation will be based on the given specification & Technical Evaluation would be conducted on for parameters as shown in the below in RfP. All relevant documents for qualifying requirements to be enclosed.
  - (i) Firm`s Turnover- ----- crores.
  - (ii) Project Experience as defined in qualifying requirements.
  - (iii) Bidders should be profitable in at least two out of last three financial years (f/y 20010-11, 2011-12 and 2012-13).
  - (iv) DPR Preparation/ Data Revalidation, Supply, Installation, Testing, Commissioning & Maintenance of LED Street Light Fixtures and Related Work should be along with luminaries` bracket & accessories.
  - (v) Special tool, Tapes, hydraulic lifts etc. in bidder`s scope, no separate payment for these.



- 6.2.3 Price Bid Evaluation: Financial Proposals of only such bidder will be considered whose offers have been declared Technically Responsive. The Financial Proposals of Technically Responsive Bidders will be considered for further evaluation. Financial proposal should be un-conditional, failing which the bid shall be summarily rejected. Bidder, who is technically suitable and follows
- (i) The lowest total annuity from base annuity for -----year is -----bided by technically qualified bidders for complete scope of work as per Para 4.0, will be the basis of financial evaluation. The base annuity is determined by MC / Govt organisation on behalf of MC using the methodology as per annexure A.
  - (ii) Providing luminaries conforming to or better the technical specification as given in RfP.
  - (iii) Fix R&M support of installed system for the entire project period.
  - (iv) Fix the replacement warranty of installed CCMS for technical defects up to five years.
- Will be considered successful bidder.

## 7.0 INSTRUCTIONS TO THE BIDDERS

- 7.1 The bidder shall submit the proposal in sealed envelopes in the following manner as specified below. All envelopes should be super-scribed with the details of the envelope, bidder name, name of the work and bid specification no.
- 7.1.1 Envelope I should contain
- (i) Tender document fee of Rs -----/- (non-refundable) by Banker's Cheque/ Demand Draft/Pay order in favour of "-----" payable @ -----
  - (ii) Bid Security fee as attachment 1 of Rs. ----- by Banker's Cheque/Demand Draft/ Pay order in favour of "-----" payable at New Delhi or
  - (iii) Power of attorney to sign the bid as attachment 2. Bidders to use their own format.
  - (iv) Certificate regarding acceptance of important terms and conditions as attachment 3.
  - (v) Covering Letter of the bidder submitting the bid in the form as stipulated in the bid document in EXHIBIT 1.

7.1.2 Envelope II should contain Techno commercial Proposal comprising:

- (i) Techno-commercial bid as indicated in bid document. Documentary evidence regarding bidder's qualifications to perform the contract as required in qualifying requirements.
- (ii) Deviation statement as per attachment 4.
- (iii) Signed copy of the RfP.

7.1.3 Envelope III should contain Price Bid, which comprise of: Price Bid (soft copy and hard copy) strictly as per the format prescribed in the tender document. In case of any discrepancy, hard copy will prevail upon soft copy.

7.1.4 Envelope IV The entire three separately sealed envelopes will then be placed in one outer envelope, sealed and marked properly and submitted to the MC office on or before the deadline for submission of the bid. Every envelope (3 inner and 1 outer) should be superscripted with Bidder name, Bid/RfP number and date, content of envelope i.e. bid security/price bid etc. , name of work and Bid opening date.

## **7.2 Technical Proposal**

In the technical proposal Bidder has to submit the following documents

- 7.2.1 The bidder should submit supporting document/ test certificates from accredited/ Govt Laboratory/ Authorised Lab/ Manufacturer (in case of LED chip) to fulfill the given Technical specification of street lights & CCMS system in the RfP document.
- 7.2.2 The bidder should submit the energy audit & Project implementation experience along with CV of officials.

## **7.3 Financial Proposal**

Bidder/Firm shall submit two hard copies (Mark as "ORIGINAL" & "COPY" and one soft copy in CD, in event of difference between original & copy, original will be considered as final) of sealed financial proposal, "Financial Proposal", clearly indicating the total cost of work including installation in both figure and words, in Indian Rupees, and signed by firms authorised signatory. In the event of any difference between figures and words, the amount indicated in words will be taken in account. Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price, which is obtained by multiplying the unit price and quantity, or between subtotal and the total price, the unit or subtotal price shall prevail, and the total price shall be corrected. If there is discrepancy between words and figures, the amount in words will prevail. If the bidder does not accept the correction of errors, its bid will be rejected and the security will be forfeited.

The financial proposal should be sealed in separate envelop and should be clearly marked as "FINANCIAL PROPOSAL" along with the work name.

All the cost associated with the assignment shall be included in the financial proposal. These shall normally cover remuneration for all the personnel, accommodation, logistic cost, DPR Preparation/ Data Revalidation, Supply, Installation, Testing, Commissioning & Maintenance of LED Street Light Fixtures up to the project period and Related Work & other administrative job etc. The total amount indicated in the financial proposal shall be without any condition attached or subjected to any assumption and shall be final and binding. In case any assumption or condition is indicated in the financial proposal, it shall be considered non-responsive and liable to be rejected.

The financial proposal shall take into account all expenses and taxes & duties. For the avoidance of doubt, it is clarified that all taxes including service tax shall be deemed to be included in the cost of service. Further all payment shall be subjected to deduction of taxes at source as per applicable laws. No other payment will be made to the bidder except as quoted in the offer & agreed by EESL through LOI / LOA / contract agreement. However payment due to quantity variation will be adjusted/ paid accordingly.

#### **7.4 Deadline for Submission of Bids**

- 7.4.1 The last date of submission of Bids shall be ----- (date) up to 11:00 Hrs. Each page of the Proposal should be initialed by the authorized signatory of the Bidder. Bid will be opened on the same day at 11.30 hrs.
- 7.4.2 The MC may, at its discretion, extend the deadline for submission of bids by issuing an amendment, in which case all rights and obligations of the MC and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

#### **7.5 Late Bids**

Any bid received from the bidder after the deadline for submission of bids will be rejected and remain unopened & returned to the bidder in unopened condition.

#### **7.6 Fees and Deposits**

- 7.6.1 The Bidder shall pay MC a non-refundable amount of Rs -----/[Rupees ----- only], towards tender document fee, by way of Demand Draft/ Pay Order, drawn on a Nationalized Bank, in favour of the -----MC, payable at location -----.
- 7.6.2 The tender document fee shall be placed in an Envelope No.1 clearly marked as tender document fee on it.

- 7.6.3 Bids, which are not accompanied by the above tender document fee, shall be rejected by MC as non-responsive.
- 7.6.4 The Bidder shall be responsible for all the costs associated with the preparation of the proposal and participation in discussions and negotiations. MC shall not reimburse or not be responsible in any way for such costs, regardless of the conduct or outcome of this process.

## **7.7 Bid Security (EMD)**

- 7.7.1 The bidder shall furnish, as a part of its proposal, a bid security of Rs-----/- (Rs. ----- Only) for which it wishes to bid for, in the form of demand draft, Bank Guarantee as per attached format issued by any nationalized/ scheduled bank except co- operative bank, in favour of "MC" payable at Location name-----, returnable after finalization of the selection of firms.

Any bid not accompanied by the bid security will be rejected by MC. MC shall not be liable to pay any interest on the bid security and the same shall be interest free.

In case EMD is submitted in the form of Bank Guarantee it should be as per enclosed format valid 45 days more than bid validity period of 180 days.

- 7.7.2 EMD shall also be placed in Envelope No. 1 clearly marked as EMD.
- 7.7.3 Bids, which are not accompanied by the above EMD, shall be rejected by MC as non-responsive.
- 7.7.4 For unsuccessful Bidders, the EMD shall be refunded within 30 days of issuance of Lol to the successful Bidder
- 7.7.5 For successful Bidder, EMD shall be released on the submission of the Bank Guarantee for contract performance.

The following shall cause the forfeiture of EMD

If the Bidder modifies/ withdraws it's Proposal except as per the provisions specified in the RFP;

If the Bidder withdraws its proposal before the expiry of the validity period of the Proposal.

If the bidder does not submit contract performance guarantee within 28 days from the date of issue of LOI or within extended period by MC.

## **7.8 Performance Security**

- 7.8.1 Within twenty-eight (28) days of the receipt of notification of award from MC, the successful bidder shall furnish the Performance Security in the form of Bank Guarantee. The value of Performance Security would be 10% of the total contract value as per attached format in exhibit 8. The Performance Security would be valid till the completion of the assignment plus three months or any such extended period as decided by the MC.

7.8.2 The following shall cause the forfeiture of the contract performance Guarantee

- (i) If the successful Bidder fails to execute the work within the stipulated time or any extension thereof provided by MC;
- (ii) If any information or document furnished by the Bidder turns out to be misleading or untrue in any material respect.

**7.9 Time table and Milestones**

Milestone	Date
Uploading of RfP document on MC website	
Last date for receipt of Queries	-----up to 17:00 Hrs
Pre-Bid Conference	-----at 10:30 Hrs
Last date of submission of bids	-----up to 11:00 Hrs
Place of submission of bids	
Opening of Technical Bid Document	-----at 11:30 Hrs
Place of opening of Technical Bid Document	
Opening of Financial Bid Document	Will be notified later
Contact Person for queries	

**7.10 Opening of Technical Proposal**

The Technical Proposal shall be opened on Date -----at 11:30 Hrs in O/o MCI in the presence of one representative from each Bidder, who may like to be present at the time of bid opening.

## **7.11 Opening of Financial Proposal**

- 7.11.1 Financial proposal of only technically qualified bidders shall be opened.
- 7.11.2 The Financial Proposal shall be opened in the presence of one representative from each of the technically qualified Bidder. Date, Time and Place for the same shall be notified by MC in due course of time. The details regarding the Financial Proposal, as provided in the Exhibit 5 would be read out.

## **7.12 Validity of Terms of Bids**

Each Proposal shall indicate that it is a firm and irrevocable offer, and shall remain valid and open for a period of not less than six months from the last date for submission of the Bids. In exceptional circumstances, MC may solicit the Bidder's consent for extension of the period of validity. A Bidder accepting MC request for extending the period of validity shall not be permitted to modify its Proposal.

## **7.13 Language of the Bid**

The bid and all associated documents shall be in English

## **7.14 Signature of Bid**

The person authorized to act on behalf of the Bidder shall sign the completed Bid and all related documentation at each page.

## **7.15 Other Instructions**

The following may please be noted:

- 7.15.1 The Bids, that are incomplete in any respect and/or are not consistent with the requirements as specified in this RFP; and/or do not contain the Covering Letter, Letter of Commitment, and Letters of Acceptance as per the specified formats; would be considered non-responsive and would be liable for rejection.
- 7.15.2 Strict adherence to formats, wherever specified, is required. Non-adherence to formats may be a ground for declaring the Proposal non-responsive.
- 7.15.3 All communication and information should be provided in writing and in the English language only.
- 7.15.4 All the communication and information provided should be legible, and wherever the information is given in figures, the same should also be mentioned in words.

- 7.15.5 No change in, or supplementary information to a Proposal shall be accepted after its submission. However, MC reserves the right to seek additional information from the Bidders, if found necessary, during the course of evaluation of the Proposal. Non- submission, incomplete submission or delayed submission of such additional information or clarifications sought by MC may be a ground for rejecting the Proposal.
- 7.15.6 The Bids shall be evaluated as per the criteria as specified in this RFP. However, within the broad framework of the evaluation parameters as stated in this RFP, MC reserves the right to make modifications to the stated Evaluation Criteria, which would be uniformly applied to all the Bidders.
- 7.15.7 The Bidder should designate one person (“Contact Person” and “Authorised Signatory”) to represent the Bidder in his dealings with MC. This designated person should be authorized to perform all tasks including, but not limited to providing information, responding to enquiries, entering into contractual commitments on behalf of the Bidder, etc.
- 7.15.8 If any claim made or information provided by the Bidder in the Proposal or any Information provided by the Bidder in response to any subsequent query of MC, is found to be incorrect or is a material misrepresentation of facts, then the Proposal may be liable for rejection.
- 7.15.9 The Bidder shall be responsible for all the costs associated with the preparation of the proposal. MC shall not be responsible in any way for such costs, regardless of the conduct or outcome of this process.
- 7.15.10 MC reserves the right to reject any or all the Proposal without assigning any reasons whatsoever.

## **7.16 Pre-bid conference**

- 7.16.1 The official representative of the Bidders may attend the pre-bid conference on -----  
----- at 10:30 Hrs, which will take place at the following address:
- O/o (Name & address of concerned officials of MC)
- 7.16.2 The purpose of the meeting will be to clarify any issues regarding the bid process.
- 7.16.3 Record notes of the meeting including the text of the questions raised and responses given will be transmitted to all the bidders who were present at the meeting and will also be put on the web-site. The clarifications that could not be furnished during pre-bid conference will be separately communicated to all the purchasers of the RFP.
- 7.16.4 Non-attendance at the pre-bid meeting will not be a cause for rejection of a Bidder.
- 7.16.5 Based on the discussion in pre bid meeting, MC reserved the right for modification in RFP

7.17 Enquiries:

Clarifications, if any, can be sought from:

(Contact details of MC officials and address)

## 8.0 FORMATS FOR SUBMISSION OF BIDS

The Technical Proposal & Financial Proposal to be submitted by the Bidders shall be organized in the manner specified below:

### 1. Envelope 1:

- (i) Demand draft for tender document fee
- (ii) Demand draft / Bank Guarantee for EMD as per Exhibit 7
- (iii) Letters of Acceptance, as per the format specified in Exhibit 3
- (iv) Covering Letter as per the format specified in Exhibit 1
- (v) Power of attorney

### 2. Envelope 2:

- (i) Technical & commercial Bid
- (ii) Description of the Bidding Company as per the format specified in Exhibit 4
- (iii) Letter of Commitment as per the format specified in Exhibit 2
- (iv) Information Requirements as per the formats specified in Exhibit 4
- (v) Authenticated Copy audited Annual Reports for the last three years for all the corporate entities that are desired to be considered for evaluation of the proposal.

### 3. Envelope 3:

- (i) Covering Letter as per the format specified in Exhibit 5
- (ii) Financial Proposal as per the format specified in Exhibit 6



## 9.0 CONFLICT OF INTEREST

The agencies / firms who are selected for the work will have to maintain the confidentiality of the information compiled. In no case the agencies / firms would be allowed to use the data or share the information with anyone else, except for MC. MC shall hold the copyrights over any of the data collected or compiled during the course of the awards.

## 10.0 CONFIDENTIALITY

MC require that recipients of this document to maintain its contents in the same confidence as their own confidential information and refrain from any public disclosure whatsoever.

## 11.0 DISCLAIMER

MC and/or its officers, employees disclaim all liability from any loss or damage, whether foreseeable or not, suffered by any person acting on or refraining from acting because of any information including statements, information, forecasts, estimates or projections contained in this document or conduct ancillary to it whether or not the loss or damage arises in connection with any omission, negligence, default, lack of care or misrepresentation on the part of MC and/or any of its officers, employees.

## 12.0 AUTHORIZED SIGNATORY (Agencies / Firms)

The “Authorized Signatory” as used in the RfP shall mean the one who has signed the RfP document forms.

The authorized signatory should be the duly Authorized Representative of the agencies / firms, for which a certificate of authority will be submitted. All certificates and documents (including any clarifications sought and any subsequent correspondences) received hereby, shall, as far as possible, be furnished and signed by the authorized signatory. The power of authorization or any other document consisting of adequate proof of the ability of the signatory to bind the agency / firm shall be annexed to the bid. MC may reject outright any proposal not supported by adequate proof of the signatory’s authority.

## 13.0 OUTSOURCING

No Outsourcing is permitted for whole task due to any reason.

## 14.0 AMENDMENT OF RFP

At any time prior to the last date for receipt of bids, MC, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective agencies / firms, modify the RFP Document by an amendment. In order to provide prospective agencies / firms reasonable time in which to take the amendment into account in preparing their bids, MC may, at their discretion, extend the last date for the receipt of bids and/or make other changes in the requirements set out in the RFP.

## 15.0 POWER OF ATTORNEY

Registered Power of Attorney executed by the agencies / firms in favour of the Principal Officer or the duly Authorized Representative, certifying him/her as an authorized signatory for the purpose of this RFP. MC shall not be responsible for non-receipt / non-delivery of the RFP due to any reason whatsoever.

The agencies / firms are advised to study the RFP document carefully. Submission of RFP shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications.

## 16.0 FRAUD AND CORRUPTION

It is the Company's policy to require that prospective implementing agency (whether declared or not), personnel, service providers or suppliers, observe the highest standard of ethics during the selection and execution of such contracts. In pursuance of this policy, the Company:-defines, for the purposes of this provision, the terms set forth below as follows:

- (i) "corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- (ii) "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
- (iii) "collusive practices" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- (iv) "coercive practices" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- (v) "obstructive practice"
- (vi) Deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Company investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
- (vii) Acts intended to materially impede the exercise of the Company's inspection and audit rights. Will reject a proposal for award if it determines that the successful bidder recommended for award, or any of its personnel or service providers, suppliers and/or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;  
Will sanction a firm or an individual, at any time, in accordance with prevailing Company's sanctions procedures, including by publicly declaring such firm or individual ineligible, either indefinitely or for a stated period of time:

- (i) To be awarded a Company financed contract; and
- (ii) To be a nominated supplier or services provider of an otherwise eligible firm being awarded a Company-financed contract.  
will require that a clause be included in the RFP and in contracts financed by a Company loan requiring successful bidders, and their agents, personnel, service providers or suppliers, to permit the Company to inspect all accounts, records and other documents relating to the submission of proposals and contract performance, and to have them audited by auditors appointed by the Company.

## 17.0 TERMS OF PAYMENT

The payment shall be made by MC on fixed annuity per annum after implementation of project either through escrow mechanism which is opened between bidder MC`s bank and MC.

## 18.0 LIQUIDATED DAMAGE

In case of delay at any stage in execution of the contract or delay in maintenance activity due to reasons solely attributed to successful bidder beyond the time schedule as agreed or any extension thereof granted by MC @ 0.5% (half percent) per week of the payment due to that stage subjected to maximum of 20% of the total value of payment due for that stage will be imposed i.e. on pro rata basis for unexecuted work.

## 19.0 FORCE MAJEURE

FORCE MAJEURE shall mean and be limited to the following:

- (i) War/hostilities
- (ii) Riot or Civil commotion
- (iii) Earthquake, flood, tempest, lightening or other natural physical disaster.
- (iv) Restrictions imposed by the Government or other statutory bodies which prevents or delays the execution of the Contract by Bidder.

In the event of any force majeure cause, Bidder or the MC shall not be liable for delays in performing their obligations under this order and the completion dates may be extended, for a period not exceeding the period of delay attributable to the causes of Force Majeure. Neither MC nor Bidder shall be liable to pay extra costs provided it is mutually established that Force Majeure Conditions did actually exist.

The Bidder shall at all times, Indemnify and keep indemnified, the MC and its officer's servants and agents, from and against all/any claims whatsoever, arising as a consequence of, or in the course of execution of the work (including but not limited to property loss and damage, personal accident, injury or death of or to property or person, of the successful bidder or any JV partner or subcontractor, and / or the servants or agents of the successful bidder, or any other JV partner).

## 20.0 TECHNICAL SPECIFICATIONS

The bidder should strictly follow the technical specification given below. Bidder has to provide complete information along with the supporting documents, test certificates and other required information in given specification sheet. Supply and installation of streetlight luminaries & other equipment should be as per the given specification. As acceptance of the below specification bidder has to submit the filled copy which is stamped & signed by authorized person/ authority of the company. Specifications are as follows

Sno	Item	Description	Remarks	Certificate copy attached	Reference no
1	<b>Name of the Manufacturer</b>				
2	<b>Address</b>				
	Registered Office				
	Head Office				
	<b>Attached separate sheet for addresses of other offices</b>				
3	<b>Contact details</b>				
	Telephone				
	Fax				
	Mobile				
	E-mail				
4	<b>Constitution of firm</b>				
5	<b>If partnership firm, name of the partners / If company, name of the directors ( as on 02-07-2013 )</b>				
6	<b>Person holding power of attorney</b>				
	Name of the person				
	Nationality of the person				
7	<b>Name of the bankers with full address</b>				
8	<b>Turn-over of the last three financial years</b>				
	Year 2010-2011				
	Year 2011-2012				
	Year 2012-2013				
9	<b>Experience in LED product designing &amp; manufacturing</b>				
10	<b>Details of LED products being manufactured</b>				
11	<b>Details of customers for LED products</b>				
	<b>Details of customers for LED Street Light products</b>				
12	<b>Area of the Manufacturing Plant</b>				
13	<b>Number of employees in the plant</b>				
	Administrative staff				
	R&D staff				
	Technical staff				
	Unskilled staff				

14	<b>Whether your product meets all the following general requirements, please state yes/no</b>				
14-a	High bright white power LEDs shall be used in the luminaires and the wattage of these LEDs shall be greater than one watt.				
14-b	LED efficiency shall be greater than 135 Lumens/watt. (Manufacturer shall submit the proof)				
14-c	LEDs shall be operated at a forward current less than 90% of its rated current.				
14-d	The LEDs used in the luminaire shall have minimum angle of 120°				
14-e	Colour rendering index (CRI) of the LEDs used in the luminaire shall be greater than 70.				
14-f	Manufacturer shall submit proof of procurement of LEDs and LM-80 / IS 16106 Test reports of specific LED.				
14-g	Manufacturer shall submit the Photo Biological Safety Report for the LEDs as per IEC 62471.				
14-h	Life span of LEDs used in the Luminaire shall be greater than 50,000 hours at 70% light output. (Manufacturer shall submit the proof)	k			
14-i	The luminaire light output (lux) shall be constant. The voltage variations / fluctuations in the specified voltage range shall not impinge upon the lux levels it produces. Maximum +/- 2% is allowed throughout the input voltage range.				
14-j	Colour temperature of the luminaire shall be made from 5000°K to 6500°K				
14-k	The distribution of luminaire illumination (control of distribution) shall be fully cut-off				
14-l	The illumination of the luminaire shall be uniform without dark bands or abrupt variations and soothing to the eye.				
14-m	Light Uniformity Ratio ( Emin/Eavg ) shall be > 0.4				
14-n	Luminaire body temperature shall not exceed 30°C from the ambient, even after continuous operation of luminaire for 24 hours.				
14-o	The luminaire shall work on single phase three wire system. ( phase, neutral & earth )  Earth resistance shall be less than 0.5 ohms				
14-p	Manufacturer shall submit the LM-79 / IS 16105 test report from any of the Accredited laboratory at the time of supply of the luminaires.				

15	<b>Construction of the LED Luminaire. Please state Yes / No</b>					
15-a	The luminaire housing shall be made up of corrosion free High Pressure Aluminium die-cast thus conforming the luminaire to minimum IP-68 protection and safety as per IEC 60598/IS 10322. NABL accredited lab report supporting the same shall be furnished.					
15-b	The luminaire shall be equipped with distortion free, clear, heat resistant, toughened, UV stabilized glass cover in the front fixed to the die cast Aluminium frame which shall be fixed to the housing by means of stainless steel screws					
15-c	The luminaire shall be built in such a way that it can withstand wind speed of 150Kmph. NABL accredited lab report supporting the same shall be furnished by the manufacturer.					
16	<b>Whether all the LED street lights manufactured by you comply with the following Technical specifications</b>					
16-01	Luminaire configuration / technical requirement	Side entry type. Shall consist of separate optical and control gear compartments. It should be early replaceable in the field condition.				
16-02	Housing/body of fitting	Pressure die cast or extruded Aluminium housing with corrosion resistant polyester powder coated.				
16-03	Cover/glass without lens or with lens	Fixture cover - UV stabilized Polycarbonate / toughened glass or equivalent will be accepted for the Luminaire <u>without lens</u> . For the luminaire with lens toughened glass may not be required with proper IP65 provision.				
16-04	Finish	Aesthetically designed housing with grey color corrosion resistant polyester powder coating				
16-05	IP Protection	Optical and control gear compartment IP-65 or more				
16-06	Operating voltage	140V to 270V universal electronic driver				
16-07	Frequency	50Hz or 60Hz				
16-09	Operating temperature	Range: 0°C to +50°C				
16-10	Power factor	> 0.9				
16-11	Optical assembly	Structured LED array for optimized roadway photometric distribution with photometric lenses designed to optimize application efficiency and minimize glare.				
16-12	Luminous flux	The luminous flux of each item to be mentioned.				
16-13	System Efficiency	System lumen output supported by LM79 report shall be submitted.				
16-14	Efficiency of Luminaire ( Lumens/watt )	> 70				
16-15	Efficacy of LED ( lumens/watt )	> 135				
16-16	Type of LED	High power SMD LED				
16-17	Correlated Colour Temperature	The correlated colour temperature shall be between 5000 <sup>o</sup> K and 6500 <sup>o</sup> K				
16-18	Colour	Warm white to cool white				
16-19	CRI	> 70				
16-20	Spread and throw of fixture	Similar to street lighting with optimum spacing to height ratio				

16-21	Impact resistance	Impact resistance $\geq$ IK 05				
16-22	Heat dissipation / heat sink	Well designed thermal management system with aluminum heat sink				
16-23	LED Drive current	$>=350$ mA				
16-24	Lumen maintenance(L-70)	System rating 50,000hrs should be as per LM80.				
16-25	Warranty for LED luminaires	8 years				
16-26	Warranty for Electronic driver	8 years				
16-27	Electrical safety as per IEC.	As per IEC safety standards.				
16-28	Driver specification	100V-300V universal electronic driver with Internal Surge protection of 2 kV.				
16-29	Total Harmonic Distortion	$< 15\%$				
16-30	Make of LED					
16-31	Light distribution	Optimized roadway photometric distribution provide optimize application efficiency and minimize glare. Photometric measurements in accordance with LM-79 / IS 16105.				
16-32	Light distribution curve / Beam pattern	Light distribution curve / spread and throw are to be mentioned.				
16-33	Lumen depreciation (LD) performance at 50,000 hours.	LM80 / IS 16106 & L-70				
16-34	Conformation standards of luminaire	The luminaire should conform to IEC60598				
16-35	Test reports of luminaire	The luminaire should be tested as per IEC 60598-2-3:2002 standards and following test reports should be submitted:				
		Heat Resistance Test				
		Thermal Test				
		Electrical / Insulation Resistance Test				
		Endurance Test				
		Humidity Test				
		Ingress Protection Test				
		Photometry Test (LM79 report)				
		Drop Test				
16-36	Third party endorsement / certification	CE / UL / LM80 (IS16106) for LED and LM79 (IS10105) for LED Luminaire				
16-37	Compliance	RoHS for LED				
16-38	Power Efficiency	$>85\%$				
16-32	Junction Temperature (T <sub>j</sub> )	Characteristic of expected Life time versus Junction temperature for the LED needs to be provided as supplied by the Manufacturer of the LED( L-70 report)				

## 21.0 BILL OF QUANTITY

### 21.1 Fixture Details

Existing Fixture	Number of Fixture	Location
HPSV 250W		
HPSV 150W		
HPSV 70W		
FTL 40W		
Bulb 100W		

### EXHIBIT 1: COVERING LETTER FOR TECHNICAL PROPOSAL

(The covering letter is to be submitted by the Bidding Company along with the Technical Proposal. This should be on the company's letterhead.)

Date:

To,

(Name & Address of MC)

Dear Sir,

Sub: DPR Preparation/ Data Revalidation, Supply, Installation, Testing & Commissioning & Maintenance of LED Street Light Fixtures and Related Works at .(Name of MC/ )" on fixed annuity services contract mode

Please find enclosed our Technical Proposal in respect of "DPR Preparation/ Data Revalidation, Supply, Installation, Testing & Commissioning & Maintenance of LED Street Light Fixtures and Related Works at .....(Name of MC/ )" on fixed annuity services contract mode" ("Project"), in response to the Request for Proposal ("RFP") document issued by the -----(Name of MC) package no:



We hereby confirm the following:

This Technical Proposal is being submitted by ..... [Insert name of the Bidder \_\_\_\_\_] in accordance with the conditions stipulated in this RfP.

We have examined in detail and have understood and agree to abide by all the terms and conditions stipulated in the RfP issued by EESL and in any subsequent communication sent by EESL. Our Technical Proposal is consistent with all the requirements of submission as stated in the RfP or in any of the subsequent communications from EESL.

Our Technical Proposal includes the Letter(s) of Commitment in the format specified in RfP from ..... \_\_\_\_ [Insert name of the corporate entities that are Promoter(s) /Affiliate(s)], who is/are the Promoter(s) /Affiliate(s) as per the conditions stipulated in the RfP, of ..... (Insert name(s) of the Bidding Company / respective Member Companies).

Our Technical Proposal includes Letters of Acceptance, consistent with the format as specified in the RfP.

The information submitted in our Technical Proposal is complete, is strictly as per the requirements as stipulated in the RfP, and is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our Technical Proposal.

We as the Bidding Company/ Lead Member, designate Mr. /Ms. (mention name, designation, contact address, phone no., fax no. etc.) as our representative who is authorized to perform all tasks including, but not limited to providing information, responding to enquiries, entering into contractual commitments on behalf of the Bidder, etc. in respect of the Project.

Signature of Chief Executive Officer / Managing Director

Common seal of ..... has been affixed in my/our presence pursuant to Board of Director's Resolution dated .....

WITNESS

1..... 2.....

(Signature)

(Signature)

Name .....

Name .....

Designation.....

Designation.....

Notes:

Managing Director/ Chief Executive Officer, being a full time director in the Board of the Bidding Company

For and on behalf of :

Name of the Person:

Designation:

Signature:

{Authorized Signatory}:

## **EXHIBIT 2: LETTER OF COMMITMENT**

{The letter of Commitment to be submitted, along with the Technical Proposal, shall be from the prospective bidder, if any, the strengths of which are desired to be considered for the purpose of evaluation of the Technical Proposal-On the Letterhead of Promoter/Affiliate).

Date:

Place:

Name of MC & Address of MC

Dear Sir,

Sub: DPR Preparation/ Data Revalidation, Supply, Installation, Testing & Commissioning & Maintenance of LED Street Light Fixtures and Related Works at .....{Name of MC/ }” on fixed annuity services contract mode

This has reference to the Technical Proposal being submitted by ..... (name of the Bidding Company), in respect of “DPR Preparation/ Data Revalidation, Supply, Installation, Testing & Commissioning & Maintenance of LED Street Light Fixtures and Related Works at ..... {Name of MC/ }” on fixed annuity services contract mode (“Project”), in response to the Request for Proposal (“RFP”) document issued by the -----

We hereby confirm the following:

1. We \_\_(name of Prospective bidder), have examined in detail and have understood and satisfied ourselves regarding the contents mainly in respect of the following:

- The Request for Proposal document issued by MC;
- All subsequent communications between MC and the Bidder, represented by (name of the Bidding Company);
- The Technical Proposal being submitted by \_\_\_\_(name of the Bidding Company).

2. We undertake to support ..... (Name of the Bidding Company / Member Company, for which the Letter of Commitment is being furnished) as detailed in the Technical Proposal being submitted by ..... (Name of the Bidding Company).

3. We therefore request MC to consider our strengths, our experience, and our track record as specified in the Proposal pursuant to the conditions specified in the RFP, for the purposes of evaluation of the Technical Proposal.

4. We have also noted the amount of the equity investment required to be made in the Project by the ..... [Insert the name of the Bidding Company].

5. In view of the above, we hereby commit to you and confirm that in the event of failure of ..... [Insert the name of Bidding Company] to invest in full or in part in the equity share capital of the Project, we shall invest the said amount not invested by ..... [Insert the name of Bidding Company].

Signature of Chief Executive Officer / Managing Director

Common seal of ..... has been affixed in my/our presence pursuant to Board of Director's Resolution dated .....

WITNESS

1.....

{Signature}

2.....

{Signature}

Name .....

Name .....

Designation.....

Designation.....

Notes:

Managing Director/ Chief Executive Officer, being a full time director in the Board of the Bidding Company

For and on behalf of:

Name of the Person:

Designation:

Signature:

{Authorized Signatory}:

Attachment-3

### EXHIBIT 3: LETTER OF ACCEPTANCE OF IMPORTANT CONDITION

DPR Preparation/ Data Revalidation, Supply, Installation, Testing & Commissioning & Maintenance of LED Street Light Fixtures and Related Works at .....(Name of MC/ )” on fixed annuity services contract mode

BIDDING DOCUMENT NO.

(CERTIFICATE REGARDING ACCEPTANCE OF IMPORTANT CONDITIONS)

(To be submitted in sealed envelope 1 along with Bid)

Bidder’s Name & Address

To,

(Name of concerned person & address of MC)

Sub: - DPR Preparation/ Data Revalidation, Supply, Installation, Testing & Commissioning & Maintenance of LED Street Light Fixtures and Related Works at .....(Name of MC/ )” on fixed annuity services contract mode

With reference to our bid proposal no. \_\_\_\_\_

Dated \_\_\_\_\_ for “DPR Preparation/ Data Revalidation, Supply, Installation, Testing & Commissioning & Maintenance of LED Street Light Fixtures and Related Works at .....(Name of MC/ )” on fixed annuity services contract mode, we hereby confirm that we have read the following provisions of the following clauses and further confirm that notwithstanding anything stated elsewhere to the contrary, the stipulation of these clauses are acceptable to us and we have not taken any deviation to these clauses.

- Terms of payment - Clause 17 of this RFP document
- Performance Security - Clause 7.8 of this RFP document
- Completion Time Guarantee - Clause 4.f of this RFP document
- Assumptions and conditions for Evaluation - As per details given in RFP clause 6.3 Proposal of evaluation

We further confirm that any deviation to the above clauses found anywhere in our bid proposal, implicit

or explicit, shall stand unconditionally withdrawn, without any implication to MC.

Date:

Signature:

Place:

Printed Name:

Designation:

Common Seal

Note: The above certificate is to be submitted in a sealed envelope -I. In the absence of this certificate in a sealed envelope-I, the bid shall be rejected and shall be returned unopened. Bidder can take a print out of it and sign.

Attachment -4

DPR Preparation/ Data Revalidation, Supply, Installation, Testing & Commissioning & Maintenance of LED Street Light Fixtures and Related Works at .....(Name of MC/ )” on fixed annuity services contract mode

BIDDING DOCUMENT NO. -----

{Deviations}

Bidder’s Name & Address

To,  
 (Name of concerned person/Authority & address of MC)

Dear Sir,

The following are the deviations and variations from and exceptions to the terms, conditions and specification of the bidding documents for “DPR Preparation/ Data Revalidation, Supply, Installation, Testing & Commissioning & Maintenance of LED Street Light Fixtures and Related Works at ..... (Name of MC/ )” on fixed annuity services contract mode”. These deviations and variations are exhaustive. We are furnishing below the cost of withdrawal for the deviations and variations stated in this Attachment-4. We shall withdraw the deviations proposed by us in this proposal at the cost of withdrawal indicated herein, failing which our bid may be rejected and bid security forfeited. We confirm that except for these deviations and variations, the entire work shall be performed as per your specifications and conditions of bidding documents. Further, we agree that additional conditions, variations, deviations if any, found in the proposal documents other than those stated in this Attachment-4, save those pertaining to any rebates offered, shall not be given effect to:

Section/ Part/ Chapter	Clause No.	Page No.	Statement of Deviations/ Variations	Cost of withdrawal
------------------------------	---------------	-------------	-------------------------------------------	--------------------

COMMERCIAL DEVIATIONS:

TECHNICAL DEVIATIONS:

Date : (Signature).....

Place : (Printed Name)  
 .....

(Designation).....

(Common Seal).....

Note : Continuations sheets of like size and format may be used as per Bidder’s

## EXHIBIT 4: INFORMATION REQUIREMENT FOR TECHNICAL PROPOSAL & QUALIFYING REQUIREMENT

This section specifies information to be provided in respect of all the relevant corporate entities as stated by the Bidder; and only such entities would be considered for evaluation.

- (i) Bidders should attach the Audited Annual Reports for the last three years of all the corporate entities which would be evaluated under Financial Capability and Experience and Track record in accordance with the information submitted by the Bidder.
- (ii) Bidder should submit copy of certificate of incorporation.
- (iii) Bidder should enclose P.O copies /Supply certificates etc. to prove that they have supplied & installed LED lights with Rs ----- . In last three years combined as per QR.

### FINANCIAL CAPABILITY

Under this head, either the consolidated financial strength of the Bidding Company / Member Company or the consolidated financial strength of any one of the Prospective bidder of the Bidding Company / Member Company would be considered.

#### 1. Financial Capability

Under this head, the annual turnover Profit of company & Net worth in the year 2010-11, 2011-12 and 2012-13 of the Bidding Company or the consolidated financial strength of any one of the Promoter(s) of the Bidding Company would be considered. In the following tables, the corporate entity that is to be considered for evaluation of Financial Capability should be mentioned clearly.

[Insert Table A for Bidder being Bidding Company]

Descriptions	Name of the Company to be considered for Evaluation of Financial Capability	2010 -11	2011 -12	2012 – 13
Annual Turn Over				
Profit of Company				
Net worth of company				

2. Signed copy of supporting document of technical specification is to be attached by Bidder.(Fill by Yes or No & Tick marks on bellow tables)

3. Approach and methodology for implementation.

4. Declaration:-

A). we are not involved in any litigation that might compromise the delivery of services required under this contract  
Yes / No

B). we are not black listed by any central / state government or any public sector undertaking in India or abroad.  
Yes / No

For and on behalf of

Signature:

(Authorised Signatory)

Name of the Person:

Designation:

## **EXHIBIT 5: COVERING LETTER FOR FINANCIAL PROPOSAL**

(This covering letter for Financial Proposal is to be submitted by the Bidding Company along with the Financial Proposal.)

Date:

Place:

(Name of concerned person/ authority & address of MC)

Dear Sir,

Sub: DPR Preparation/ Data Revalidation, Supply, Installation, Testing & Commissioning & Maintenance of LED Street Light Fixtures and Related Works at .....(Name of MC/ )” on fixed annuity services contract mode

Please find enclosed our Financial Proposal in respect of “DPR Preparation/ Data Revalidation, Supply, Installation, Testing & Commissioning & Maintenance of LED Street Light Fixtures and Related Works at .....(Name of MC/ )” on fixed annuity services contract mode” (“Project”), in response to the Request for Proposal (“RFP”) document issued by the MC, bid package no: -----  
-----.



We hereby confirm the following:

The Proposal is being submitted by ..... (Name of the Bidder) in accordance with the conditions stipulated in the RFP.

We have examined in detail and have understood, and abide by; all the terms and conditions stipulated in the RFP document issued by MC and in any subsequent communication sent by MC.

Our Financial Proposal is consistent with all the requirements of submission as stated in the RFP or in any of the subsequent communications from MC

We would be solely responsible for any errors or omissions in our Financial Proposal.

For and on behalf of

Signature :

(Authorised Signatory)

Name of the Person :

Designation :

### EXHIBIT 6: FORMATE FOR FINANCIAL PROPOSAL

(This format for Financial Proposal is to be submitted by the Bidding Company along with the financial covering letter.)

- (i) Cost of DPR preparation/Data revalidation inclusive of tax
- (ii) LED Luminaries price equivalent to lumen/watt as compare to respective conventional lamp along with Central control & Monitoring System, installation, warranty & maintenance upto project period

S. No.	Existing Fixture (Without Chock / igniters/etc. wattage)	Number of Fixture	Fixture Type & Wattage with Bracket to be quoted by bidder ( Including wattage)	Unit Price for fixture with CCMS, installation warranty, R&M up to project period including ED, sales tax, service tax, Transport & Insurance F.O.R.(-----MC Location)	Total Amount with CCMS, installation warranty, R&M up to project period including ED, sales tax, service tax, Transport & Insurance F.O.R.(-----MC Location)
1	HPSV 250W				
2	HPSV 150W				

3	HPSV 70W				
4	FTL 40 W				
5	Bulb 100 W				

- Number of existing fixture are without driver`s watt.

- (iii) % of assured energy saving including Central control & Monitoring system in street lighting project of MC is to be ----- Sharing of saved energy with MC-----
- (iv) Value of annuity is to be paid by MC to Bidder up to the project period-----
- (v) Project period-----
- Total Prices = A+B (in words) =

Bid will be evaluated as per procedure given in bid evaluation process.

For and on behalf of

Signature :  
(Authorised Signatory)

Name of the Person :  
Designation :

Attachment -1

### **EXHIBIT 7: BANK GUARANTEE (BID SECURITY / EMD FORM)**

Bank Guarantee

(To be stamped in accordance with Stamp Act, if any, of the Country of the issuing Bank)

Bank Guarantee No. ....

Date.....

To:

(Name of concerned authority & address of MC)

Sub: DPR Preparation/ Data Revalidation, Supply, Installation, Testing & Commissioning & Maintenance of LED Street Light Fixtures and Related Works at .....(Name of MC/ )” on fixed annuity services contract mode

Dear Sir,

I accordance with invitation for bids under your bidding Document/Package No. -----  
-----, M/s \_\_\_\_\_ having its Registered/Head office at \_\_\_\_\_  
\_\_\_\_\_ (here in after called bidder) wish  
to participate in the said bid for (name of package)

As an irrevocable bank guarantee against Bid Security for an amount of Rs. \_\_\_\_\_ valid for 225 days from date of bid opening i.e. from \_\_\_\_\_ to \_\_\_\_\_ require to be submitted by the bidder as a condition precedent for participation in the said bid which amount is liable to be forfeited on the happening of any contingencies mentioned in the bidding documents.

We, the \_\_\_\_\_ (Name and address of the bank), having our head office at \_\_\_\_\_  
\_\_\_\_\_ guarantee and undertake to pay immediately on demand by MC the amount of Rs. \_\_\_\_\_ without any reservation, protest, recourse. Any such demand made by the employer shall be conclusive and binding on us irrespective of any dispute or difference raised by the bidder.

The Guarantee shall be irrevocable and shall remain valid up to \_\_\_\_\_. If any further extension of guarantee is required , the same shall be extended to such period (not exceeding one year) on receiving instructions from \_\_\_\_\_ ( bidder’s Name) \_\_\_\_\_, on whose behalf guarantee is issued.

In witness whereof the bank, through its authorized officer, has set its hand and stamp on this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_ at \_\_\_\_\_.

Witness:

Signature:

Signature:

Name:

Name:

Official address:

Designation with Bank Stamp

Authorized vide

Power of Attorney no.

Date

NOTE: 1. Complete mailing address of the Head Office of the Bank to be given.

The bank guarantee validity date shall be forty five (45) days after the last date for which the bid is valid.

The Stamp Paper of appropriate value shall be purchased in the name of guarantee issuing Bank.

The Bank Guarantee shall be issued on a stamp paper of value as applicable in the State of the issuing bank in India or the State of Delhi in India or the State of India from where the BG shall be operated, whichever is higher.

While getting the Bank Guarantee issued, Bidders are required to ensure compliance to the Bank Guarantee Verification Check List.

## BANK GUARANTEE CHECK LIST

1	Bank Guarantee No.	
2	Issuing Bank	
4	Nature of BG & No. of Pages	
5	Validity of BG	
6	Package Description	
7	Party & Contracts ref.	Name, Add., Tel, Fax, mail
8	Bank Reference	

## CHECK LIST

S. No.	Details of Checks	Y/N
a)	Is the BG on non-judicial Stamp Paper of appropriate value, as per Stamp Act?	
b)	Whether date, purpose of purchase of stamp paper and name of the purchaser are indicated on the back of Stamp paper under the Signature of Stamp vendor? (The date of purchase of stamp paper should be not later than the date of execution of BG and the stamp paper should be purchased either in the name of the executing Bank or the party on whose behalf the BG has been issued. Also the Stamp Paper should not be older than six months from the date of execution of BG)	

c)	In case the BG has been executed on Letter Head of the Bank, whether adhesive Stamp of appropriate value has been affixed thereon?	
d)	Has the executing Officer of BG indicated the name, designation and Power of Attorney No.? / Signing Power no. etc., on the BG?	
e)	Is each page of BG duly signed / initiated by executants and whether stamp of Bank is affixed thereon? Whether the last page is signed with full particulars including two witnesses under seal of Bank as required in the prescribed proforma?	
f)	Does the Bank Guarantees compare verbatim with the Proforma prescribed in the Bid Documents?	
g)	In case of any changes in contents of text, whether changes are of minor / clerical nature (which in no way limits the right of MC in any manner)?	
h)	In case of deviations in text of BG, which materially affect the right of MC, whether the changes have been agreed based on the opinion by Legal Department or BG I considered acceptable on the basis of opinion of law Department already available on the similar issue.	
i)	Are the factual details such as Bid Document No. NOA/LOA / Contact No., Contract Price, Percentage of Advance, Amount of BG and Validity of BG correctly mentioned in the BG ?	
j)	Whether overwriting / cutting if any on the BG have been properly authenticated under signature and seal of executant?	
k)	Whether the BG has been issued by a Bank in line with the provisions of Bid /Contract documents?	
l)	In case BG has been issued by a Bank other than those specified of Bid / Contract Documents, is the BG confirmed by a Bank in India acceptable as per Bid / Contract documents?	

## EXHIBIT 8: PERFORMANCE BANK GUARANTEE

(On Non – Judicial Stamp Paper of appropriate value and purchased in the name of executing Bank)

### PROFORMA OF BANK GUARANTEE FOR CONTRACT

#### PERFORMANCE

Ref.: .....

Bank Guarantee No.....

Date.....

To:

(Name of the concerned authority & address of MC)

Sub: DPR Preparation/ Data Revalidation, Supply, Installation, Testing & Commissioning & Maintenance of LED Street Light Fixtures and Related Works at .....(Name of MC/ )” on fixed annuity services contract mode

Dear Sirs,

In consideration of the MC, ( hereinafter referred to as the 'Owner,' which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns ) having awarded to M/s.....with its Registered / Head Office at .....( hereinafter referred to As the 'Contractor', which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators and assigns ), a Contract by issue of Owner's Letter of Intent No.....dated ..... and the same having been unequivocally accepted by the Contractor resulting in a 'Contract' bearing No.....dated.....valued at .....for .....and the contractor ( Scope of Contract ) having agreed to provide a Contract Performance Guarantee for the faithful performance of the entire Contract equivalent to \* ..... % (percent) of the said value of the Contract to the Owner.

We .....(Name & address ) having its Head Office at ..... ( hereinafter referred to as the 'Bank', which expression shall, unless repugnant to the context or meaning thereof, include its successors administrators, executors and assigns ) do hereby guarantee and undertake to pay the Owner, on demand any all money payable by the Contractor to the extent of .....as aforesaid at any time up to .....(days / months / year) without any demur, reservation, contest, recourse or protest and / or without any reference to the Contractor. Any such demand made by the Owner and Contractor or any dispute pending before any court, tribunal or any other authority. The Bank undertakes not to revoke this guarantee during its currency without previous consent of other Owner and further agrees that the guarantee herein contained shall continue to be enforceable till the owner discharges this guarantee.

The owner shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee from time to time to extent the time for performance of the Contract by the Contractor. The owner shall have the fullest liberty, without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they to enforce or to forbear to enforce any covenants, contained or implied, in the Contract between the owner and Contractor or any other course of or remedy or security available to the owner. The Bank shall not be released of its obligations under these presents by any exercise by the owner of its liberty with reference to the matters aforesaid on any of other indulgence shown by the owner or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank.

The Bank also agree that the Owner at its option shall be entitled to enforce this Guarantee against the Bank as a Principal debtor, in the first instance without proceeding against the Contractor and not withstanding any security or other guarantee that the owner may have in relation to the Contractor's liabilities.

Notwithstanding anything contained herein above our liability under this guarantee is restricted to \_\_\_\_\_ and it shall remain in force up to and including\*\* \_\_\_\_\_

And shall be extended from time to time for such period (not exceeding one year), as may be desired by M/s. \_\_\_\_\_ on whose behalf this guarantee has been given.

Witness

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 19 \_\_\_\_\_ at \_\_\_\_\_

Witness

\_\_\_\_\_

Signature

\_\_\_\_\_

Signature

\_\_\_\_\_

\_\_\_\_\_

Name

\_\_\_\_\_

Bank's Rubber Stamp

\_\_\_\_\_

Official Address

Name

\_\_\_\_\_

\_\_\_\_\_

Designation with Bank Stamp

Attorney as per power of Attorney

No. \_\_\_\_\_ Dated \_\_\_\_\_

NOTE: 1. Complete mailing address of the Head Office of the Bank to be given.

The bank guarantee validity date shall be forty five (45) days after the last date for which the bid is valid.

The Stamp Paper of appropriate value shall be purchased in the name of guarantee issuing Bank.

The Bank Guarantee shall be issued on a stamp paper of value as applicable in the State of the issuing bank in India or the State of Delhi in India or the State of India from where the BG shall be operated, whichever is higher.

While getting the Bank Guarantee issued, Bidders are required to ensure compliance to the Bank Guarantee Verification Check List.

## BANK GUARANTEE CHECK LIST

1	Bank Guarantee No.	
2	Issuing Bank	
4	Nature of BG & No. of Pages	
5	Validity of BG	
6	Package Description	
7	Party & Contracts ref.	Name, Address, Tel, Fax, E—mail
8	Bank Reference	

## CHECK LIST

S.No.	Details of Checks	Y/N
a)	Is the BG on non-judicial Stamp Paper of appropriate value, as per Stamp Act?	
b)	Whether date, purpose of purchase of stamp paper and name of the purchaser are indicated on the back of Stamp paper under the Signature of Stamp vendor? (The date of purchase of stamp paper should be not later than the date of execution of BG and the stamp paper should be purchased either in the name of the executing Bank or the party on whose behalf the BG has been issued. Also the Stamp Paper should not be older than six months from the date of execution of BG)	
c)	In case the BG has been executed on Letter Head of the Bank, whether adhesive Stamp of appropriate value has been affixed thereon?	
d)	Has the executing Officer of BG indicated the name, designation and Power of Attorney No. / Signing Power no. etc., on the BG?	
e)	Is each page of BG duly signed / initiated by executants and whether stamp of Bank is affixed thereon? Whether the last page is signed with full particulars including two witnesses under seal of Bank as required in the prescribed Performa?	
f)	Does the Bank Guarantees compare verbatim with the Performa prescribed in the Bid Documents?	
g)	In case of any changes in contents of text, whether changes are of minor / clerical nature (which in no way limits the right of EESL in any manner)?	
h)	In case of deviations in text of BG, which materially affect the right of EESL, whether the changes have been agreed based on the opinion by Legal Department or BG I considered acceptable on the basis of opinion of law Department already available on the similar issue.	
i)	Are the factual details such as Bid Document No. NOA/LOA / Contact No., Contract Price, Percentage of Advance, Amount of BG and Validity of BG correctly mentioned in the BG ?	
j)	Whether overwriting / cutting if any on the BG have been properly authenticated under signature and seal of executants?	
k)	Whether the BG has been issued by a Bank in line with the provisions of Bid /Contract documents?	



l)	In case BG has been issued by a Bank other than those specified of Bid / Contract Documents, is the BG confirmed by a Bank in India acceptable as per Bid / Contract documents?	
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## LIST OF BANKS ACCEPTABLE FOR SUBMISSION OF BANK GUARANTEE FOR BID SECURITY

### SCHEDULED COMMERCIAL BANKS

#### SBI AND ASSOCIATES

Sl. No.	Name of Banks	S l . No.	Name of Banks
1.	State Bank of India	5.	State Bank of Mysore
2.	State Bank of Bikaner and Jaipur	6.	State Bank of Patiala
3.	State Bank of Hyderabad	7.	State Bank of Saurashtra
4.	State Bank of Indore	8.	State Bank of Travancore

### NATIONALISED BANKS

Sl. No.	Name of Banks	S l . No.	Name of Banks
9.	Allahabad Bank	13.	Canara Bank
10.	Andhra Bank	14.	Central Bank of India
11.	Bank of India	15.	Corporation Bank
12.	Bank of Maharashtra	16.	Dena Bank
17.	Indian Bank	18.	Indian Overseas Bank
19.	Oriental Bank of Commerce	20.	Punjab National Bank
21.	Punjab & Sind Bank	22.	Syndicate Bank
23.	Union Bank of India	24.	United Bank of India
25.	UCO Bank	26.	Vijaya Bank
27.	Bank of Baroda		

### SCHEDULED PRIVATE BANKS (INDIAN BANKS)

Sl. No.	Name of Banks	S l . No.	Name of Banks
27.	Bank of Rajasthan	41.	Sangli Bank Ltd.
28.	Bharat Overseas Bank Ltd.	42.	South Indian Bank Ltd.
29.	Catholic Syrian Bank	43.	Tamilnad Mercantile Bank Ltd.

30.	City Union Bank	44.	United Western Bank Ltd.
31.	Dhanalakshmi Bank	45.	ING Vysya Bank Ltd.
32.	Federal Bank Ltd.	46.	UTI Bank Ltd.
33.	Jammu & Kashmir Bank Ltd.	47.	S.B.I. Commercial & International Bank Ltd.
34.	Karnataka Bank Ltd.	48.	Ganesh Bank of Kurundwad Ltd.
35.	Karur Vysya Bank Ltd.	49.	INDUSIND Bank Ltd.
36.	Lakshmi Vilas Bank Ltd.	50.	ICICI Bank Ltd.
37.	Lord Krishna Bank Ltd.	51.	HDFC Bank Ltd.
38.	Nainital Bank Ltd.	52.	Centurion Bank of Punjab Limited
39.	Kotak Mahindra Bank	53.	Development Credit Bank Ltd.
40.	Ratnakar Bank Ltd.	54.	Yes Bank

#### (D) SCHEDULED PRIVATE BANKS (FOREIGN BANKS)

Sl. No.	Name of Banks	Sl. No.	Name of Banks
55.	Abu Dhabi Commercial Bank Ltd.	71.	Sonali Bank
56.	ABN Amro Bank Ltd.	72.	Standard Chartered Bank
57.	American Express Bank Ltd.	73.	J.P Morgan Chase Bank
58.	Bank of America NA	74.	State Bank of Mauritius
59.	Bank of Bahrain & Kuwait	75.	Development Bank of Singapore
60.	Mashreq Bank	76.	Bank of Ceylon
61.	Bank of Nova Scotia	77.	Bank International Indonesia
62.	The Bank of Tokyo-Mitsubishi UFJ Limited.	78.	Arab Bangladesh Bank
63.	Calyon Bank	79.	Cho Hung Bank
64.	BNP Paribas	80.	China Trust Bank
65.	Barclays Bank	81.	Mizuho Corporate Bank Ltd.
66.	Citi Bank	82.	Krung Thai Bank
67.	Deutsche Bank	83.	Antwerp Diamond Bank N.V. Belgium
68.	The Hong Kong and Shanghai Banking Corporation Ltd.	84.	Internationale Nederlanden Bank N.V. (ING Bank)
69.	Oman International Bank	85.	Bank of China Ltd.
70.	Societe Generale		

**(E) PUBLIC SECTOR BANK**

Sl. No.	Name of Banks	Sl. No.	Name of Banks
86.	IDBI Ltd.		

Annexure- A

**Methodology for Calculation of Annuity**

- (i) Demonstration: The MC or Govt organisation on behalf of MC has to demonstrate the energy saving through replacement of existing lights with equivalent LED lights. The following are the energy protocol for efficiency demonstration in municipal energy efficiency projects
- Based on a designated demonstration area decided by the Municipality, retrofit the energy efficiency technology like LED street light as replacement of existing HPSV/Tube light etc.
  - Putting a meter for a week on old lamp before LED installation & putting energy meter on installed LED lamp.
  - The actual consumption data will be collected and analysed. The difference will be the energy savings agreed for the entire municipality.
  - The other electrical & Physical parameter will also collected & analysed for performance evaluation.
- (ii) Annuity Elements: The follows will be annuity element,
- Assumption: certain assumption will be taken by MC for annuity calculation like project period, interest on loan, life of fixture, increasing rate of electrical tariff etc.
  - Price of fixture & CCMS: it is to be taken based on market survey.
  - Annual R & M cost of MC for street light.
  - % energy saving considering DISCOM & MCs electrical loss
  - Installation & warehouse charges,
  - Taxes liability during & after project implementation.
  - Number of fixtures
  - Working Hour of street light.
  - Depreciation of equipment.
- (i) Annuity Calculation: The base annuity will be arrived by financial calculation with the help of available findings & standard financial calculation practice by authorised financial of MC.

4.

## Template of Implementation Agreement

## IMPLEMENTATION AGREEMENT

— Between —

---

(Name of MUNICIPAL CORPORATION),

\_\_\_\_\_ (Area-CITY)

- And -

---

(Name of SERVICE PROVIDER)

\_\_\_\_\_ (Area- City)

This Agreement is entered into on this the \_\_\_\_ day of \_\_\_\_\_ 2013

Between

The \_\_\_\_\_, having its office at \_\_\_\_\_, acting through its Representative \_\_\_\_\_ (hereinafter referred to as the "Municipality" which expression shall, unless the context otherwise requires, include its administrators, successors and assigns) of Second Part;

And

M/s ..... (Name of SERVICE PROVIDER/BIDDER), a Company ..... (Description of SERVICE PROVIDER/BIDDER with ADDRESS) through its Representative \_\_\_\_\_ (hereinafter referred to as the "SERVICE PROVIDER/BIDDER" which expression shall, unless the context otherwise requires, include its administrators, successors/successors in business and permitted assigns and substitutes) of the Third Part.

As the context may require, the Municipality, and the SERVICE PROVIDER/BIDDER, may hereinafter be referred to individually as a "Party", and collectively as the "Parties".

**WHEREAS:**

A. The Municipality is desirous to implement energy efficiency in the area under the Municipality by interventions in the present illumination of xxx (number) street light consisting of [T5 Fittings, HPSV and Metal Halide lamp fittings etc.]. The Municipality in its drive to reduce its energy consumption on account of street lighting, has decided to replace the existing street lights with modern and energy efficient LED luminaries.

B. As a prelude to the above objective the Municipality invited SERVICE PROVIDER/BIDDER to undertake the supply of LED Street Lights giving output of lux levels / lumen output equivalent to the existing lights, which shall include their installation, maintenance and warranty replacement during the project period on the principle of repayment of the cost of the project by the \_\_\_\_\_ in monthly installments on the basis of cost reimbursement. In response thereto, SERVICE PROVIDER/BIDDER has agreed to install the latest LED street light technology as replacements to the existing lights.

C. Accordingly the \_\_\_\_\_ issued Letter of Award bearing No: \_\_\_\_\_ dated \_\_\_\_\_ to the “SERVICE PROVIDER/BIDDER” requesting, inter alia, the execution of this Agreement which the “SERVICE PROVIDER/BIDDER” as acknowledged through the Letter of Acceptance No. \_\_\_\_\_ dated & and agrees to implement the Project in accordance with the terms and conditions of this Agreement.

D. The \_\_\_\_\_ acknowledges and confirm that this agreement is irrevocable not withstanding any change in the Municipality in its administrative setup. The Municipality further confirms that this agreement shall cease only after completion of payment by it to the “SERVICE PROVIDER/BIDDER” and on “SERVICE PROVIDER/BIDDER” discharging all the obligations as required in terms of this Agreement.

NOW THEREFORE, in view of the offer, mutual promises and consideration set out herein, the Municipality and the “SERVICE PROVIDER/BIDDER” (each individually a “Party” hereto, and collectively the “Parties”) hereby agree to be bound by the provisions of this Agreement.

## **ARTICLE 1: DEFINITIONS AND INTERPRETATION.**

### **Definitions**

In this Agreement, unless repugnant to the context in which these words and expressions appear the words and expressions defined below shall have the meanings assigned to them: -

- (i) “Agreement” means and includes this signed Agreement including the Annexures of the Agreement, the “Notice of Award” issued by the Municipality, the written clarification(s), addendum, amendments, all other document/papers attached as annexure/appendix and the Bid documents.
- (ii) “Agreement Period” is the period from the date of signing this Agreement till completion of payment of all dues by the Municipality to the “SERVICE PROVIDER/BIDDER” in terms of this Agreement or till termination of this Agreement as set out in the Articles: 13 and 14 of this Agreement.
- (iii) “Annexures” mean the additional documents specifically mentioned in this Agreement.
- (iv) “Applicable Laws” means all laws which are applicable to the Project and/or extending to the State of..... (Name of STATE), having been enacted or brought into force by Government of India or Govt. of .....(Name of STATE) including regulations and rules made there under, and judgments, decrees, injunctions, writs and orders of any Court of Record, as may be in force and effect during the subsistence of this Agreement.

- (v) "Associates" means in relation to either Party and/or Joint Venture (JV) Members, a person who controls, is controlled by, or is under the common control with such Party or Joint Venture (JV) Member as used in this definition, the expression "control" means with respect to a person which is a corporation, the ownership, directly or indirectly, of more than 50% of the voting shares of such person, and with respect to a person which is not a corporation, the power to direct the management and policies of such person, whether by operation of law or by contract or otherwise.
- (vi) "BOT" means the replacement, maintenance and monitoring of LED Street Lights on cost reimbursement principle.
- (vii) "Change in Law" means the occurrence of any of the following events after the Compliance Date:
- (a) Enactment of any new Law.
  - (b) The repeal in whole or in part (unless re-enactment with the same effect) or modification of any existing Law.
  - (c) The commencement of any Law, which has not yet entered into effect.
  - (d) The change in interpretation or application of any Law by a Court of Record.
  - (e) The imposition or requirement for a new statutory or regulatory approval of a modification in the terms and conditions on which a statutory approval has already been obtained.
  - (f) A fresh imposition of a tax or duty or cess that was not in existence on the Proposal Acceptance Date. It is specially clarified that a change in the rate of a tax or duty etc. shall not be considered a Change in Law for the purpose of this Article if the tax or duty etc. itself was in existence on the Proposal Acceptance Date.
- (viii) "Clearance" means, as on the date of execution of this Agreement, any consents, licenses, approvals, permits, exemptions, registrations, filings or other of whatever nature, which is necessary for effective implementation of the project.
- (ix) "Competent Authority" means any agency, authority, department, ministry, public or statutory Person of the Govt. of..... (Name of STATE) or Government of India, or any local authority, or any other sub-division thereof with authority over aspects of implementation of the Project having jurisdiction over all or any part of the Project Facility or the performance of all or any of the services or obligations of the "SERVICE PROVIDER/BIDDER" under or pursuant to this Agreement.
- (x) "Compliance Date" means the date of signing this Agreement by the parties.



- (xi) "Conditions Precedent" means the conditions set out in Article: 6 hereof.
- (xii) "Consideration amount" means the amount payable to the "SERVICE PROVIDER/BIDDER" on account of supply of materials as per this agreement which represents cost of material, cost of finance, cost of warranty and applicable taxes and duties as detailed in Article 4 of this agreement.
- (xiii) "Cost of the Project " means the cost incurred by the "SERVICE PROVIDER/BIDDER" for implementation of the project and which has to be repaid by the Municipality on monthly installments to the "SERVICE PROVIDER/BIDDER", which shall include the cost of the material, cost of maintenance, cost of warranty, the duties and taxes as applicable and also the financial cost arising out of deferred payment.
- (xiv) "Date of Completion of Supplies" the date of receipt of last batch of supplies by Municipality under this agreement.
- (xv) "Day" means calendar day, "Month" means 30 (thirty) days and "Year" means 365 days.
- (xvi) "Design Documents" means and includes all drawings, calculations, computer application software (programs), samples, patterns, models and other manuals and information of a similar nature prepared in relation to the installation and operation of Energy Efficient LED Street Lights.
- (xvii) "Directive" means any present or future requirement, instruction, direction, order, rule or regulation issued by any Competent Authority which is legally binding or which is notified by the \_\_\_\_\_, and any modification, extension or replacement thereof from time to time in force.
- (xviii) "Dues" means the unpaid amount of the consideration amount payable to the "SERVICE PROVIDER/BIDDER" as shown in Annexures XX to YY of this agreement.
- (xix) "Encumbrances" means any encumbrances such as mortgage, charge, pledge, hypothecation, security, interest, assignment, privilege or priority of any kind having the effect of security or other such obligations and shall include without limitation any designation of loss payees or beneficiaries or any similar arrangement under any insurance policy pertaining to the Energy Efficiency Lights implanted within the Project Facility.
- (xx) "Engineer in charge" means an engineer appointed by the Municipality for the particular sector.
- (xxi) "Financial Model" means the financial model on deferred payment basis as detailed in Article: 4 of this Agreement.

- (xxii) "Financial Year" means the year commencing from 1st April of any calendar year to the 31st March of the next calendar year except in the first and the last calendar year of the subsistence of this Agreement. In the first year of subsistence of this Agreement, it shall mean the period from the Compliance Date to 31st March, it means the period from 1st April to the Transfer Date.
- (xxiii) "Force Majeure" or "Force Majeure Event" shall mean an act, event, condition or occurrence specified in the Article 15.
- (xxiv) "Good Industry Practice" means those practices, methods, technique standards, skill, diligence and prudence which are generally and reasonably expected and accepted from a reasonably skilled, prudent and experienced manufacturer engaged in manufacturing of LED Street Lights and supplying to projects akin to the Project covered under this Agreement. It would include good practices in the design, which would be expected to result in the performance of its obligation by the "SERVICE PROVIDER/BIDDER" in accordance with this Agreement and Applicable Laws.
- (xxv) "Implementation Completion Certificate" means the certificate to be issued by the Municipality in favour of the "SERVICE PROVIDER/BIDDER" on completion of installation of all the LED Street Lights in respective Sectors in terms of this Agreement.
- (xxvi) "Implementation Period" or "Time for Completion of Implementation" means the period of xx months from the date of compliance of conditions precedent in terms of Article 6 of this agreement.
- (xxvii) "Light Point" means a fully erected pole with an arm for mounting street light and live electrical cable, which is sufficient for connecting the luminary.
- (xxviii) "Material Adverse Effect" means consequences of events outside the control of the Affected Party which (a) render any right vested in a Party by the terms of his Agreement ineffective, or (b) significantly impairs or frustrates the ability of any Party to observe and perform in a timely manner its obligations under this Agreement, or (c) frustrates a material provisions of this Agreement or any of the Project Agreements.
- (xxix) "Party" means any of the parties to this Agreement.
- (xxx) "Person" means any natural person, firm, corporation, company, partnership, joint venture, trust or other entity, having legal capacity to sue and be sued in its name.
- (xxxi) "Project Agreements" means, collectively, this Agreement, the Financing Documents, Implementation Agreements and Operation & Maintenance Agreements, if any, in each case as entered into, amended, supplemented or otherwise modified from time to time.

- (xxxii) "Project In-charge" means an engineer appointed by Municipality for the monitoring the total project.
- (xxxiii) "Project Insurance" means the insurance taken out by or on behalf of the Municipality and/or the "SERVICE PROVIDER/BIDDER" pursuant to the provisions of this Agreement.
- (xxxiv) "Proposal Acceptance Date" means the date of signing of this Agreement.
- (xxxv) "Subcontractor" means the implementation contractor(s) and/or operation and maintenance contractor(s) and/or any other contractors and, sub-contractors, or "SERVICE PROVIDER/BIDDER" of services or equipment's or part thereof, as the context may require, to whom the "SERVICE PROVIDER/BIDDER" contracts or subcontracts the Works or part.
- (xxxvi) "Statutory Auditors" means an Independent, recognized and reputable firm of the chartered accountants duly licensed to practice in India acting as the Independent statutory auditors of the "SERVICE PROVIDER/BIDDER" under the provisions of Companies Act, 1956 including any statutory modification or re-enactment or replacement thereof, for the time being in force.
- (xxxvii) "Tax" means any tax, duty, levy, toll charge whatsoever charged, imposed or levied under Applicable Laws.
- (xxxviii) "Proposal" means the SERVICE PROVIDER/BIDDER's quoted Financial Proposal including the SERVICE PROVIDER/BIDDER's Proposal submitted to the Municipality and as accepted by the Municipality.
- (xxxix) "Termination Date" means the date on which this Agreement terminates upon completion of payment of all dues of the "SERVICE PROVIDER/BIDDER" by the Municipality and discharge of the obligations by the "SERVICE PROVIDER/BIDDER" in terms of this agreement or as indicated in clause 13 of this agreement.
- (xl) "Termination Payment" means the amount payable by the Municipality to the "SERVICE PROVIDER/BIDDER" upon the termination of this Agreement and shall consist of payments relating to deferred payment, and associated financial costs as the case may be, and other such amounts as are expressly-provided for under Articles: 14 and 15.
- (xli) "Third Party" means any Person, real or judicial, or entity other than the Parties to this Agreement.
- (xlii) Principles of Interpretation.

In this Agreement, unless the context otherwise requires:

- (i) Any reference to a statutory provision shall include such provision as is from time to time modified or re-enacted or consolidated so far as such for modification or re-enactment or consolidation applied or is capable of applying to any transactions entered into hereunder;
- (ii) Reference to laws of Govt. of .....(Name of STATE), law of India or Indian laws or regulations having force or law shall include the laws, acts, ordinances, rules, regulations, guidelines or byelaws which have the force of law in State of ..... (Name of STATE);
- (iii) The headings are for convenience and reference only and shall not be used in and shall not affect, the construction or interpretation of this Agreement;
- (iv) Words importing Person or Parties shall include firms and corporations and any organisation having legal capacity to sue and be sued in its name.
- (v) Words importing the singular shall include the plural and vice-versa where it requires.
- (vi) Any reference to day shall mean a reference to a calendar day;
- (vii) Any reference to month shall mean a reference to a calendar month;
- (viii) The Annexures of this Agreement form an integral part of this Agreement and will be in full force and effect as though they were expressly set out in the body of this Agreement;
- (ix) Any reference at any time to any agreement, deed, instrument or document of any description shall be construed as reference to that agreement, deed, instrument or other document as amended, varied, supplemented, modified or suspended at the time of such reference;
- (x) References to recitals, Articles, sub-articles or Schedules in this Agreement shall except where the context otherwise requires, be deemed to be references to recitals, Articles, sub-articles and Schedules of or to this Agreement;
- (xi) Any Agreement, consent, approval, authorisation, notice, communication information or report required under or pursuant to this Agreement from or by any Party shall be valid and effective only if it is in writing under the hands of duly authorised representative of such party, as the case may be, in this behalf and not otherwise;
- (xii) Any reference to any period commencing “from” a specified day or date and “till” or “until” a specified day or date shall include both such days and dates; provided that if the last day of any period computed under this Agreement is not a business day, then the period shall run until the end of next business day.

## Measurements and Arithmetic Conventions

All measurements and calculations shall be in metric system and calculations done in 2 decimals places, with the third digit of 5 or above rounded up and below 5 belong down except in Fee calculation which shall be rounded off to nearest Rupee Hundred (100).

### Ambiguities within Agreement

In case of ambiguities or discrepancies within this Agreement, the following shall apply:

- (i) Between two Articles or more of this Agreement, the provisions of specific Article relevant to the issue under the consideration shall prevail over those in other Articles;
- (ii) Between the Articles and the Annexures, the Articles shall prevail, save and except as expressly provided in the Articles or the Schedules;
- (iii) Between the written description on the Drawings and the Specification and Standards, the latter shall prevail;
- (iv) Between the written description on the Drawing and the specific written dimension, the latter shall prevail;
- (v) Between any value written in numerals and that in words, the later shall prevail, and
- (vi) Between the terms of Expression of interest / tender document and this agreement, the latter shall prevail.

## Priority of Documents

The documents forming this Agreement are to be taken as mutually explanatory of one another. If there is an ambiguity or discrepancy in the documents, the Municipality shall issue any necessary clarification or instruction to the "SERVICE PROVIDER/BIDDER" not later by Compliance Date, and the priority of the documents shall be as follows:

- (i) This signed Agreement (including its Annexures), along-with any Addendums
- (ii) Instructions to the "SERVICE PROVIDER/BIDDER" enclosed attached with this signed Agreement; and
- (iii) All other documents enclosed attached with this signed Agreement.

## ARTICLE 2: TECHNICAL SPECIFICATIONS OF LED STREET LIGHTS

The Municipality has proposed to replace the existing Street Lights with LED Street Lights of XXW, XXW, XXW and XXW and the "SERVICE PROVIDER/BIDDER" has agreed to supply these lights in terms of this Agreement.

In addition to the other terms and conditions of this Agreement, it is mutually agreed by the Parties that the LED Street lights proposed to be supplied under this Agreement shall conform to the general specifications given in the Annexure-1 to this Agreement and the technical specifications as detailed there under:

S. No.	Street Light	Technical Specification
1	XXW	As per Annexure-2 to this Agreement
2	XXW	As per Annexure-3 to this Agreement
3	XXW	As per Annexure-4 to this Agreement
4	XXW	As per Annexure-5 to this Agreement
5	XXXW	As per Annexure-6 to this Agreement

## ARTICLE 3: SCOPE OF THE PROJECT

3.1 The Scope of the Project (the "Scope of the Project") shall mean and include during the Agreement Period "the Supply of xxx LED Street Lights as detailed below".

At present the existing street lights in the Municipality service area is in the following configuration in different Sectors:

Sr. No.	Sector	No. of Lights					Total
		70W	96W	150W	250W	400W	
1							
2							
3							
4							
5							
6							
	Total						

The “SERVICE PROVIDER/BIDDER” will supply LED Street Lights of different wattages as indicated in the Table below against the existing Lights in different Sectors of \_\_\_\_\_:

Sr. No.	Sector	Wattage of existing Lights	Wattage of LED Lights proposed to replace with	
			Wattage	Quantity
1		70W	XXW	
2		96W	XXW	
3		150W	XXW	
4		250W	XXW	
5		400W	XXXW	
		Sector Total		
Grand Total				

**Summary of LED Lights proposed to be supplied is as under:**

S. No.	Wattage of LED Lights to be supplied	Quantity
1	XXW	
2	XXW	
3	XXW	
4	XXW	
5	XXXW	
	Total	

3.2 The “SERVICE PROVIDER/BIDDER” shall ensure supply of Energy Efficient LED luminaries complete with all accessories, including mounting arrangement for street light. The LED Street Lights must conform to the specifications given in Article: 2 of this Agreement.

It is clarified herewith that notwithstanding what is stated in the Scope of Project, the responsibility rests with the “SERVICE PROVIDER/BIDDER” for installation, operation and maintenance of the LED Street Lights supplied by the “SERVICE PROVIDER/BIDDER” during the Project Period and also extend the warranty to the supplied lights during the Agreement.

The “SERVICE PROVIDER/BIDDER” shall start supply and installation of the LED Lights in accordance with the terms and conditions of this Agreement within ninety days from the date of compliance of Conditions Precedent as stated in Article 6 of this Agreement and complete the same in all respects within next nine months from that date. At the time of installation of lights if the “SERVICE PROVIDER/BIDDER” finds that the actual light points are different as compared to the number specified in Article 3.1 above and or the respective work orders, it will communicate the same to Municipality in writing. The Municipality on

receipt of such communication shall rectify and resolve the issue within seven days, failing which the installation shall be deemed completed for all purposes under this Agreement. Accordingly the Municipality shall issue "Implementation Completion Certificate" in favour of the "SERVICE PROVIDER/BIDDER" forthwith.

- 3.3. The "SERVICE PROVIDER/BIDDER" shall maintain the installed LED Lights initially for a period of xx months from the date of issuing "Implementation Completion Certificate" to be issued by the Municipality in favour of the "SERVICE PROVIDER/BIDDER" on completion of installation of all the LED Street Lights in respective sectors in terms of this Agreement. However, the "SERVICE PROVIDER/BIDDER" shall extend the warranty for the equipment under reference and maintain the same for another period of xx years.
- 3.4. The "SERVICE PROVIDER/BIDDER" shall ensure with the proposed LED Lights that the present lux level of approximately xx on main and dense traffic roads and lux level of about xx on colony and less traffic roads is maintained or lumen output of new lamps is equivalent to existing lamps.
- 3.5. The SERVICE PROVIDER/BIDDER after dismantalisation of existing fittings shall deposit the same on every day basis as per the directions of the Engineer in-charge of the particular sector of Municipality against the acknowledgement in writing of the same from Municipality. The "SERVICE PROVIDER/BIDDER" shall have no responsibility for safe keeping of the dismantled lights once they are offered for deposit with the Engineer in-charge.

## ARTICLE 4: DEFERRED PAYMENT

### 4.1 Deferred Payment

- 4.1.1 Subject to and in accordance with the terms and conditions set forth in this Agreement, the Municipality hereby award the order for supplying xxx (number) LED Street Lights of the types and specifications as detailed in Articles: 2 and 3 of this Agreement on deferred payment mode covering a period of xx (number) Months for payment of the consideration amount to the "SERVICE PROVIDER/BIDDER" as per the schedules given in Annexures XX to YY of this agreement.
- 4.1.2. Subject to and in accordance with the terms and conditions set forth in this Agreement the "SERVICE PROVIDER/BIDDER" shall be responsible/entitled:
  - 4.1.2.1 To implement the Project as per the Scope of Work of the Project (more specifically detailed in Article 3) of this Agreement;
  - 4.1.2.2 To fulfill its obligations under this Agreement, undertake activities either by itself or through subcontracting arrangements and to appoint contractors, sub-contractors, agents, advisors and consultants without in any way relieving the SERVICE PROVIDER/BIDDER of its obligations as set out in this Agreement;
  - 4.1.2.3 To exercise such other rights as the Municipality may determine as being necessary or desirable for the purposes incidental and necessary for implementing the Project.

The "SERVICE PROVIDER/BIDDER" acknowledges, accepts and confirms that the covenant contained herein is an essence of this Agreement.



#### 4.2 Actions in Support of the Deferred Payment

- (i) The Parties shall recognize and undertake not to, in any manner, violate or cause breach of the terms of this Agreement.
- (ii) Municipality shall issue work order for the entire project. However, at the commencement of the Project, Project in-charge shall issue instructions in writing with respect of each sector separately giving the break-up of the consideration amount as shown in the table below.

Sr. No.	Sector	Total number of Lights	Total Consideration to be paid to "SERVICE PROVIDER/BIDDER" in xx months represents Cost of lights, cost of finance, cost of warranty, cost of maintenance and applicable taxes & duties (Rs)
1			
2			

The Municipality shall complete payment of the total consideration in respect of the (above supplies in xx months as per the details shown in Annexures XX to YY of this Agreement. In each sector, the first payment shall be due not later than one month from the date of completing installation of the specified quantity of the lights. The Municipality shall issue "Implementation Completion Certificate" in favour of the "SERVICE PROVIDER/BIDDER" on completion of installation of all the LED Street Lights in respective sectors in terms of this Agreement as shown-in the table above. The Municipality immediately thereafter shall deliver to the SERVICE PROVIDER/BIDDER a copy of its instructions to its bankers to remit the designated amount by 1<sup>st</sup> day of every month as per repayment schedules as shown in Annexures XX to YY of this Agreement to the "SERVICE PROVIDER/BIDDER" nominated bank amount.

- (iii) For the purpose of financing the Project, the "SERVICE PROVIDER/BIDDER" shall have the right to discount the individual bills duly acknowledged by the Municipality on installation of the LED Street Lights with their bankers without any limitation.
- (iv) The Municipality shall extend lien during the period of this Agreement on its bank account or a bank guarantee totaling to Rs. xx Crore (Rs. xx Crores) towards security to the [Bank, Branch, City] that the SERVICE PROVIDER/BIDDER may opt for arranging the required funding for execution of this project.
- (v) The lien and the bank guarantee so extended shall be irrevocable and shall not be withdrawn by the Municipality till the total cost of project is repaid to the "SERVICE PROVIDER/BIDDER."
- (vi) The Municipality and the "SERVICE PROVIDER/BIDDER" undertakes not to terminate or repudiate this Agreement prior to its expiry otherwise, then in accordance with the provisions of this Agreement.

## ARTICLE 5: IMPLEMENTATION PERIOD

- (i) The "Implementation Period" or "Time for Completion of Implementation" shall be a period of x(number) months from the date of compliance of Conditions
- (ii) Precedent as stated in Article-6 of this agreement, wherein the "SERVICE PROVIDER/BIDDER" shall be required to supply Energy Efficient LED Street Lights as detailed out in Articles 2 and 3 of this Agreement.
- (iii) The "SERVICE PROVIDER/BIDDER" guarantees that the time for completion of implementation of the Project shall be achieved in accordance with the provisions of this Agreement and not later than the implementation Period, as specified above.
- (iv) Extension of Time: The "SERVICE PROVIDER/BIDDER" may apply for an extension of the Implementation Period under this agreement either before or after the end of Implementation Period on account of any of the following causes:-
  - (a) A Variation;
  - (b) A Force Majeure event;
  - (c) A cause of delay giving an explicit and express entitlement to extension of time under any Articles in this Agreement,
  - (d) Any delay, impediment or prevention by the \_\_\_\_\_;
  - (e) Any delay caused by Competent Authorities.

Provided that the "SERVICE PROVIDER/BIDDER" shall at all times use its best endeavors to minimize any delay in the performance of its obligations under this Agreement, whatever may be such delay.

If the "SERVICE PROVIDER/BIDDER" intends to apply for an extension of the Implementation Period, the "SERVICE PROVIDER/BIDDER" shall give notice to the Municipality of such intention as soon as possible and in any case within 30 (thirty) days of the start of the event giving rise to any such delay, together with any other notice required under this Agreement and relevant to such cause. Any such notice shall state the extent of the actual and anticipated delay and its anticipated effect on the Implementation Period, and shall specify the steps the "SERVICE PROVIDER/BIDDER" proposes to take to minimize such delay. The "SERVICE PROVIDER/BIDDER" shall keep such records as may be necessary to substantiate any application, at a location acceptable to the Municipality or its representative, and such other records as may reasonably be requested by the Municipality. The "SERVICE PROVIDER/BIDDER" shall provide and permit the Municipality to inspect all such records.

Provided that the "SERVICE PROVIDER/BIDDER" has complied with this Article, the Municipality shall proceed to determine either prospectively or retrospectively such adjustment as may be due, taking into account all relevant circumstances. The Municipality shall notify the "SERVICE PROVIDER/BIDDER" accordingly. When determining each extension of time, the Municipality shall review its previous determinations and may revise, but shall not decrease, the extension, and provided that the extension of time is not a consequence of any negligence, default or breach of this Agreement by the "SERVICE PROVIDER/BIDDER" or those for whom it is responsible.

However, the "SERVICE PROVIDER/BIDDER" shall not be entitled to an extension of the Implementation Period, to the extent that the delay in respect of which the extension of time is requested is attributable to any negligence, default or breach his Agreement by the "SERVICE PROVIDER/BIDDER" or those for whom it is responsible, as determined by the STATE GOVERNMENT.

## **ARTICLE 6: CONDITIONS PRECEDENT**

Subject to the express terms to the contrary, limited aspects of the Implementation Period (when commenced) and any legitimate rights arising in law, the rights and obligations under this Agreement shall take effect only upon fulfillment of all the Conditions Precedent specified below in this Article 6 on or before the expiry of a period of 30(Thirty) days from the Compliance Date. However, the Municipality may at any time at its sole discretion and in writing, waive fully or partially any of the Conditions Precedent of the "SERVICE PROVIDER/BIDDER".

### **6.1 Conditions Precedent for the Municipality**

The Municipality shall:

- (i) Provide an undertaking that all of the Representations and Warranties of the Municipality set forth in this Agreement are true and correct as on date this Agreement are as on the Compliance Date and thereafter;
- (ii) Issue government orders or gazette notifications as necessary for implementing the Project.
- (iii) Issue necessary documents in support of lien on its bank account or bank guarantee to the maximum extent of Rs. xx Crore (Rs. xx Crore) detailed in Article: 4.2 immediately after signing this agreement.
- (iv) Provide the "SERVICE PROVIDER/BIDDER" copies (certified as true by the designated of the Municipality) of all resolutions adopted by the Municipality for execution, delivery and performance of this Agreement.

## 6.2 Conditions Precedent for the “SERVICE PROVIDER/BIDDER”:

The “SERVICE PROVIDER/BIDDER” shall:

- (i) Provide an undertaking that all of the Representations and Warranties of the “SERVICE PROVIDER/BIDDER” set forth in this Agreement are true and correct as on date of this Agreement and as on the Compliance Date and thereafter;
- (ii) Provide the Municipality copies (certified as true copies by an authorised officer of the “SERVICE PROVIDER/BIDDER”) of its constitutional documents.
- (iii) Provide the Municipality copies (certified as true by the Director of the “SERVICE PROVIDER/BIDDER”) of all resolutions adopted by the Board of Directors of the “SERVICE PROVIDER/BIDDER” authorising the execution, delivery and performance of this Agreement by the “SERVICE PROVIDER/BIDDER”;
- (iv) Provide that upon request in writing by the “SERVICE PROVIDER/BIDDER”, the Municipality may, at its sole discretion and in writing, waive fully or partially any or all the Conditions Precedent set forth in this Article.

## 6.3 Obligations to satisfy Condition Precedents

- (i) Each Party hereto shall use all reasonable endeavors to procure the satisfaction in full of its respective Conditions Precedent set out above within 30 (Thirty) days from Compliance Date.
- (ii) Each Party shall bear its respective costs and expenses of satisfying Conditions Precedents unless otherwise expressly provided.

## 6.4 Non-fulfillment of Conditions Precedent

- (i) In the event that any of the Conditions Precedents relating to the “SERVICE PROVIDER/BIDDER” have not been fulfilled within 30(Thirty) days from the Compliance Date and also, the Municipality has not waived them fully or partially, then necessary action shall be initiated to cure the defects by mutual agreement of the Parties to this Agreement.
- (ii) In the event the SERVICE PROVIDER/BIDDER opts to terminate or dishonoring this Agreement due to non-fulfillment of Conditions Precedent by the Municipality or for any other reason what so ever not specified in this agreement, the Municipality shall be liable to compensate the “SERVICE PROVIDER/BIDDER” all the costs/ expenses incurred in relation to the project from the Compliance Date.

## ARTICLE 7: COMMERCIAL CONSIDERATION

### 7.1 Commercial Consideration to the “SERVICE PROVIDER/BIDDER”

- (i) The calculations of the deferred Payment shall be as per provisions laid down in the Annexures XX to YY of this Agreement.
- (ii) The Municipality shall complete payment of the total consideration in respect of the above supplies in xx months as per the details shown in Annexures XX to YY of this Agreement. In each sector, the first payment shall be due not later than one month from the date of completing installation of the specified quantity of the Street LED lights.
- (iii) However, the \_\_\_\_\_ is at liberty to pay over and above the monthly liability at any time if it desires to reduce its liability without any cost to the “SERVICE PROVIDER/BIDDER”.
- (iv) ‘The “SERVICE PROVIDER/BIDDER” shall be entitled to get the amounts credited as per point [b] above on respective due dates. In the event if any credit is not received within 7 days from the respective due date, the “Municipality” shall compensate the “SERVICE PROVIDER/BIDDER” with the interest at the rate of 16% till the dues are cleared.

### 7.2 Performance Assurance

- (i) The “SERVICE PROVIDER/BIDDER” shall ensure that for the entire Agreement Period the LED Street Lights supplied shall perform to the agreed standards as per LM-80 and L-70 standards as detailed in Annexures 7 and 8 to this Agreement.
- (ii) The “SERVICE PROVIDER/BIDDER” shall extend warranty to the products supplied under this agreement throughout the Agreement Period (i.e. xx months of BOT period) covering any manufacturing defects. The warranty shall be limited to only manufacturing defects. Further the warranty shall also be not applicable for any damage or malfunctioning of LED Street Lights on account of lightning strike, fire or any kind of Act of God beyond the control of either of the Parties including adverse weather conditions, earth quakes, rains, tempest, whirlwind, landslides, storms, volcanic eruptions, fire or any calamities, riots, high voltage, unauthorized handling, accidents and thefts.
- (iii) In the event of any dispute about the performance/efficiency of any luminary supplied under this Agreement such luminary shall be tested on calibrated watt meter for verification of consumption of power in Watts. If the luminary fails to the agreed specification the “SERVICE PROVIDER/BIDDER” shall rectify or replace it in terms of warranty at its own cost throughout the Agreement Period.
- (iv) It is mutually agreed by the Parties that the “SERVICE PROVIDER/BIDDER” shall have no responsibility for demonstrating power savings in the form of periodic power bills and the SERVICE PROVIDER/BIDDER’s responsibility is only limited to the scope specified in clause (c) above.

- (v) The Performance Assurance of the “SERVICE PROVIDER/BIDDER” shall be limited to only warranty during the Agreement Period.
- (vi) The “SERVICE PROVIDER/BIDDER” shall handover to Municipality up to 1% of the total quantity of lights in each sector and in respect of each wattage immediately after completion of supplies to that sector so as to use these lights as possible replacements for any defects that may arise. The “SERVICE PROVIDER/BIDDER” shall be responsible to collect defective lights from the store of ‘Municipality’ at its own cost and arrange repair/ replacements in terms of warranty and return the same to the store of the Municipality within a period of 8 to 10 days from collecting them.

## **ARTICLE 8: OBLIGATIONS OF THE “MUNICIPALITY” DURING AGREEMENT PERIOD**

### **8.1 General Obligations**

It shall be the obligation of Municipality to ensure the following are made available or executed:

- (i) The Municipality shall assist in getting permissions and exemptions as may be required under laws relating to it and regulating the Project as applicable in the State of..... (Name of STATE). However the responsibility lies with the SERVICE PROVIDER/BIDDER of getting necessary permissions and exemptions.
- (ii) The shall ensure that from the date of this Agreement and till the completion of the Project, the “SERVICE PROVIDER/BIDDER” has access to the Project Facilities for the purpose of carrying out the SERVICE PROVIDER/BIDDER’s obligations under this Agreement.
- (iii) The Municipality shall receive the supplied LED Lights as per the terms of this Agreement and ensure their safe storage in a closed enclosure at their own cost till their installation.
- (iv) The Municipality shall promptly receive the existing lights after their dismantilation from the “SERVICE PROVIDER/BIDDER” on daily basis and the “SERVICE PROVIDER/BIDDER” shall have no responsibility for their safe keeping once they are dismantled and offered for deposit with Municipality.
- (v) The Municipality shall be responsible for any misplacement, thefts and damages of the LED Lights supplied from the date of the supply and till the completion of this Agreement. The Municipality shall pay the cost of the particular fitting to the “SERVICE PROVIDER/BIDDER” in the event of any misplacements / thefts / damages of the supplied lights.

## ARTICLE 10: OBLIGATIONS OF THE “SERVICE PROVIDER/BIDDER” DURING IMPLEMENTATION PERIOD

### General Obligations

The “SERVICE PROVIDER/BIDDER” shall observe, undertake, comply with and perform, in addition to and not in derogation of its obligations elsewhere set out in this Agreement, the following:

- (i) Carry out the works strictly in accordance with the provisions and the Annexures of this Agreement, and all works not mentioned in this Agreement but which may be inferred to be necessary for safe, reliable and efficient the Implementation and operation of the Project;
- (ii) Undertake to achieve project completion no later than xx (xx) months subject to extension of time granted under Article 5 (c) of this Agreement from the date of compliance of Conditions Precedent, provided that the SERVICE PROVIDER/BIDDER shall not be in breach of this Article, if any non-fulfillment or the delay in fulfillment of its obligation are caused by (i) the occurrence of an event of Force Majeure or (ii) Municipality default or any other act or omission of the Municipality in contravention of its obligations under this Agreement, and in the event of any delay in installation of street lights, the “Municipality” shall be entitled to penalize SERVICE PROVIDER/BIDDER Re. 1 per day per light for the delayed days. Also in case the fittings do not work then the Municipality shall be entitled to penalize SERVICE PROVIDER/BIDDER Rs. 5 per day per light for the delayed days beyond 72 hours of receiving complaint.
- (iii) The “SERVICE PROVIDER/BIDDER” shall ensure supply of Energy Efficient LED Street Lights as per the specifications mentioned in this Agreement and related Annexures by maintaining sound manufacturing, testing and R&D facility. The ‘SERVICE PROVIDER/BIDDER’ shall provide the test reports of the lights and LM-79 certificates.
- (iv) The “SERVICE PROVIDER/BIDDER” shall plan, organise and execute the supplies so that the Agreement is executed without any friction.
- (v) Sub-Contracting: The “SERVICE PROVIDER/BIDDER” shall be entitled to subcontract tasks relating to its obligations and responsibilities under this Agreement, including but not limited to tasks relating to implementation of the Project. However, the “SERVICE PROVIDER/BIDDER” shall be sole and primary person responsible to the Municipality for the observance of all the provisions of this Agreement. The “SERVICE PROVIDER/BIDDER” shall be responsible for the acts or defaults of any of its subcontractor, its agents or employees, as if they were the acts or defaults of the “SERVICE PROVIDER/BIDDER”, its agents or employees. Any subcontracting shall not relieve the “SERVICE PROVIDER/BIDDER” of its obligations and liabilities under this Agreement.

- (vi) To duly supervise, monitor, control the activities of Contractors, sub-contractors, their employees and agents under their respective Project Agreement as may be necessary.
- (vii) Not to permit any contractor, sub-contractors or other person, claiming through or under the "SERVICE PROVIDER/BIDDER", to create or place any security interest over all or any part of Project Facility or on any rights of the "SERVICE PROVIDER/BIDDER" herein or under this Agreement, save and except as expressly permitted in this Agreement.
- (viii) Shall within the time permitted by the Municipality, make good all the defects and ensure that the items or materials complies with this Agreement.
- (ix) Shall ensure that if any designated devices, materials or any process covered by letters of "Patents" or "Copyrights", the right for such use shall be secured by the "SERVICE PROVIDER/BIDDER" by suitable legal arrangements and agreements with the Patents owner. A copy of the agreement, if any, shall be submitted to the Municipality. Municipality shall not be responsible in any way, in case of any violation of patents and copy rights.
- (x) The "SERVICE PROVIDER/BIDDER" shall acknowledge and recognise that time is essence of this Agreement and that the performance of its obligations shall be construed accordingly.
- (xi) The "SERVICE PROVIDER/BIDDER" shall not be authorised to incur any expenditure on behalf of the Municipality, or to enter into any commitment as agent of the Municipality, unless specifically and explicitly authorised by the Municipality under the terms of agreement. The "SERVICE PROVIDER/BIDDER" shall not amend, terminate, modify or supplement any agreement on behalf of or in the name of the Municipality.
- (xii) The "SERVICE PROVIDER/BIDDER" undertakes to install the fittings at his own cost and risk with no extra burden on Municipality for installation.

## **ARTICLE 11: OBLIGATIONS OF PARTIES**

### **Each Party shall:**

- (i) Comply with and perform its respective obligations under this Agreement and shall work and cooperate in good faith with the with respect to all the obligations and rights hereunder of the other Party.
- (ii) Carry out their respective obligations during the Implementation Period.

## **ARTICLE 12: Representations and Warranties**

### **12.1 Representations and Warranties of the Municipality**



The Municipality represents and warrants to the “SERVICE PROVIDER/BIDDER” that:

- (i) The Municipality has full power and authority to execute, deliver and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;
- (ii) The Municipality have taken all necessary action to authorize the execution, delivery and performance of this Agreement ;
- (iii) This Agreement constitutes a legal, valid and binding obligation enforceable against the Authority in accordance with the terms hereof;
- (iv) The Authority is subject to civil and commercial laws of India with respect to this Agreement and hereby expressly and irrevocably waives any sovereign immunity in any jurisdiction in regard to matters set forth in this Agreement.
- (v) All information provided by the Municipality in connection with the Project is true and accurate in all material respects to the best of its knowledge ; and
- (vi) The Municipality has the financial standing and capacity to perform obligations under this Agreement.

## **12.2 Representations and Warranties of the “SERVICE PROVIDER/BIDDER”**

The “SERVICE PROVIDER/BIDDER” represents and warrants to the Municipality that:

- (i) It is duly organised, validly existing and in good standing under the laws of the jurisdiction of its incorporation;
- (ii) It has full power and authority to execute, deliver and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;
- (iii) It has taken all necessary corporate and other action under Applicable Laws and its constitutional documents to authorise the execution, delivery , and performance of this Agreement;
- (iv) It has the financial standing and capacity to undertake the Project;
- (v) This Agreement constitutes its legal, valid and binding obligation enforceable against it in accordance with the terms hereof;
- (vi) It is subject to civil and commercial laws of India with respect to this Agreement and it hereby expressly and irrevocably waives any immunity in any jurisdiction in respect thereof;
- (vii) All the information furnished in this Agreement /Bid /Proposal is, and shall be, true and correct as on the Proposal Acceptance Date. If in case any false or misleading information, as furnished by the “SERVICE PROVIDER/BIDDER”, is found at a later stage after the signing of this Agreement, it shall entitle the Municipality to terminate the said signed Agreement between the Parties.

- (viii) The “SERVICE PROVIDER/BIDDER” has complied with all Applicable Laws and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have Material Adverse Effect on its financial condition or its ability to perform its obligations and duties under this Agreement. ,

### **12.3 Obligation to Notify Change**

In the event that any of the representations or warranties made/ given by the “SERVICE PROVIDER/BIDDER” ceases to be true or stands changed, it shall promptly notify Municipality of the same.

## **ARTICLE 13: TERMINATION FOR DEFAULT**

### **13.1 The “MUNICIPALITY” Events of Default**

Each of the following events or circumstances, to the extent not caused by a default of the “SERVICE PROVIDER/BIDDER” or Force Majeure, and it not cured within the Cure Period, which shall be 30 (thirty) days (unless provided otherwise in this Agreement), from the date of notice of default (the “Default Notice”) from the “SERVICE PROVIDER/BIDDER”, shall be considered for the purpose of this Agreement as events of default of the Municipality.

- (i) The Municipality is in breach of its obligations under this Agreement, which has a Material Adverse Effect upon the “SERVICE PROVIDER/BIDDER” or the Project and this breach is not cured within a Cure Period of 30 days from the date of Default Notice.
- (ii) The Municipality is in breach of any representation or warranty made under this Agreement or it repudiates this Agreement.
- (iii) Govt. of .....(Name of STATE) or any Competent Authority has by an act of commission or omission created a circumstance that has a Material Adverse Effect on the “SERVICE PROVIDER/BIDDER” and the Municipality has failed to compensate the “SERVICE PROVIDER/BIDDER” for the same through an adjustment.
- (iv) The Municipality fails to pay the SERVICE PROVIDER/BIDDER the consideration as applicable.

### **13.2 Termination by the “SERVICE PROVIDER/BIDDER”**

Without prejudice to any right or remedy, which the “SERVICE PROVIDER/BIDDER” may have under this Agreement, upon occurrence of Default or Event of Default by the “Municipality”, the “SERVICE

PROVIDER/BIDDER” shall be entitled to issue a Termination Notice to the “Municipality”. The Termination Notice shall grant the “Municipality” a further period of 30 (thirty) days (the “Termination Period”) to make a representation, and if, during the Termination Period the “Municipality” takes suitable steps to remedy the situation, the “SERVICE PROVIDER/BIDDER” shall be entitled to withdraw the Termination Notice. If the Termination Notice is not withdrawn within the Termination Period, this Agreement will automatically terminate on the expiry the Termination Period.

### **13.3 “SERVICE PROVIDER/BIDDER” Event of Default**

Each of the following events or circumstances, to the extent not caused by default of the “Municipality” or Force Majeure, and if not cured within the “Cure Period which shall be 30 (thirty) days from the date of notice of default (the “Default Notice”) from the “Municipality”, shall be considered for the purpose of this Agreement as Events of Default of the “SERVICE PROVIDER/BIDDER”:

- (i) The “SERVICE PROVIDER/BIDDER” is in breach of its obligations under this Agreement, which has a Material Adverse Effect upon the Municipality or the Project.
- (ii) The “SERVICE PROVIDER/BIDDER” is in breach of any representation or warranty made under this Agreement or it repudiates this Agreement.
- (iii) The “SERVICE PROVIDER/BIDDER” abandons the Project or any of its material obligations as provided under this Agreement.

### **13.4 Termination by the Municipality**

Without prejudice to any other right or remedies which the Municipality may have under be entitled to terminate this Agreement by following the procedure set forth under this Agreement, upon occurrence of a “SERVICE PROVIDER/BIDDER” Event of Default, the Municipality shall be entitled to terminate this Agreement by following the procedure set forth hereinafter:

- (i) The Municipality shall be entitled to issue a Termination Notice to the “SERVICE PROVIDER/BIDDER”. The Termination Notice shall grant the “SERVICE PROVIDER/BIDDER” 30 (thirty) days (the “Termination Period”) to make a representation, and if, during the Termination Period the “SERVICE PROVIDER/BIDDER” takes suitable steps to remedy the default situation, the “MUNICIPALITY” shall be entitled to withdraw the Termination Notice.
- (ii) If the “SERVICE PROVIDER/BIDDER” fails cure the defaults within the Termination Period this Agreement stands terminated by the Municipality.
- (iii) In case of termination, either party shall issue notice in writing. The notice given on the address given in the title clause of this agreement will be considered as a valid notice.

## ARTICLE 14: CONSEQUENCES OF TERMINATION

Upon termination of this Agreement for any reason, the terms of specified in this Agreement shall cease to exist and are not enforceable.

### 14.1 Termination Payment for Termination by “SERVICE PROVIDER/BIDDER”

- (i) Upon Termination by the “SERVICE PROVIDER/BIDDER” on account of the Municipality Default under Articles 13.1 and 13.2, the “SERVICE PROVIDER/BIDDER” shall be entitled to receive from Municipality by the way of Termination Payment a sum equal to the consideration of the Project as specified in Article 4 of this Agreement minus the amounts paid till termination of the Agreement minus the interest not applicable for the balance period of the Agreement after termination.
- (ii) On account of the Municipality default leading to premature termination of this Agreement, the Municipality shall pay compensation to the “SERVICE PROVIDER/BIDDER” at the rate of 10% of the consideration of the project as specified in Article 4 of this Agreement, in addition to the amount payable in terms of clause 14.1 (a) above.
- (iii) Payments due to the “SERVICE PROVIDER/BIDDER” as calculated under Article 14.1 (a) and (b) shall be made within 30 (thirty days) days of termination of the Agreement pursuant to Article 13.1 and 13.2.
- (iv) In case of termination of agreement, either party will have no claims against each other except stated in clause no 14.1 (a) and (b).

### 14.2 Termination Payment for Termination by Municipality

- (i) Upon Termination by the “MUNICIPALITY” on account of default by the “SERVICE PROVIDER/BIDDER” during period of this Agreement, in accordance with the provisions of Articles 13.3 & 13.4, the “SERVICE PROVIDER/BIDDER” shall be entitled to receive from the Municipality by the way of Termination Payment a sum equal to 90% of the consideration of the project as specified in Article-4 of this Agreement minus the amounts paid till termination of the Agreement minus the interest not applicable for the balance period of the Agreement after termination.
- (ii) However, if the Termination by the Municipality on account of the default by the “SERVICE PROVIDER/BIDDER” before supplies are effected in terms of this Agreement, then the “SERVICE PROVIDER/BIDDER” shall not be entitled for any Termination Payments.

### 14.3 Other rights and obligations upon Termination

- (i) Upon Termination of this Agreement and payment of Termination Payment to the "SERVICE PROVIDER/BIDDER" as applicable in full, the Municipality shall:-
  - (a) Take control of the Project forthwith;
  - (b) Take control of all Energy Efficient LED Street Lights supplied under this Agreement.
  - (c) Shall return to the "SERVICE PROVIDER/BIDDER" the 1% of additional LED Lights provided as possible replacements.
- (ii) Upon Termination of this Agreement it shall be the responsibility of the "SERVICE PROVIDER/BIDDER" to co-operate with the Municipality and comply with all reasonable requests thereof including the execution of any documents and other actions, provided the Municipality bears any reasonable Costs incurred by the "SERVICE PROVIDER/BIDDER" relating thereto.

## ARTICLE 15: FORCE MAJEURE

### 15.1. Force Majeure Event

In this Agreement "Force Majeure" means an event occurrence in India of any or all of the Non-Political Force Majeure Event, Indirect Political Force Majeure Event and Political Force Majeure Event described in Articles 15.2, 15.3, and 14.4 respectively hereinafter which prevents the Party claiming Force Majeure (the "Affected Party") from performing its obligations under this Agreement and which act or event:-

- (i) Is beyond the reasonable control of and not arising out of the fault or negligence of the Affected Party or the failure of such Party to perform its obligations hereunder;
- (ii) The Affected Party has been unable to prevent by the exercise of due diligence and reasonable efforts, skill and care and
- (iii) Has a Materially Adverse Effect on the Project.

### 15.2 Non-Political Force Majeure Events

For the purposes of Article 15.1, Non-Political Force Majeure Events shall mean one or more of the following acts or events:

- (i) Acts of God or events beyond the reasonable control of the Affected Party which could not reasonably have been expected to occur, extreme adverse, weather or environmental conditions, lightning, earthquakes, heavy rains, cyclones, tempest, whirlwind, landslides, storms, floods, volcanic eruptions or fire (to the extent originating from a source external to the Facility or not designed for in Implementation Works);
- (ii) Radioactive contamination or ionising radiation;
- (iii) Strikes or boycotts (other than those involving the Contractors, or their respective employees/representatives or to any act or omission of any of them) interrupting supplies and services to the Project for a continuous period exceeding 6(Six) months from the Compliance Date, and not being an Indirect Political Event set forth in Article 14.3;
- (iv) Any judgment or order of any court of competent jurisdiction or statutory authority in India made against the "SERVICE PROVIDER/BIDDER" in any proceedings for the reason other than failure of the "SERVICE PROVIDER/BIDDER" to comply with any Applicable Law or Clearances or on account of breach thereof, or of contract, or enforcement of this Agreement or exercise of any of its rights under this Agreement by the \_\_\_\_\_.

### 15.3 Indirect Political Force Majeure Event

For the purposes of Article 15.1, Indirect Political Force Majeure Events mean one or more of the following acts or events by or on account of the \_\_\_\_\_, Govt. of .....(Name of STATE), Gol or any other Competent Authority:

- (i) An act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, unexpected call up of armed forces, blockade, embargo, rebellion, riot, religious strife, bombs or civil commotion, sabotage, terrorism which prevents normal operations of the "SERVICE PROVIDER/BIDDER" for a continuous period exceeding 6 (six) months from the Compliance Date.
- (ii) Industry wide or state wide or India wide strikes or industrial action for a continuous period exceeding 6 (six) months from the Compliance Date.

### 15.4 Political Force Majeure Event

For the purposes of Article 14.1, Political Force Majeure Events shall mean one or more of the following acts or events by or on account of the \_\_\_\_\_, Govt. of .....(Name of STATE), Gol or any other Competent Authority:

- (i) Appropriation or compulsory confiscation, by any Competent Authority any Project Assets or rights of the "SERVICE PROVIDER/BIDDER" or of the Contractors; or
- (ii) Any unlawful or unauthorised or without jurisdiction, revocation of, refusal to renew or grant without valid cause any consent or approval required by the "SERVICE PROVIDER/BIDDER" or any of the Contractors to perform their respective obligations under this Agreement (other than a consent, the obtaining of which is a condition precedent) provided that such delay, modification, denial, refusal or revocation did not result from the SERVICE PROVIDER/BIDDER's or any contractor's inability or failure to comply with any condition relating to the grant, maintenance or renewal of such consents or permits.

### 15.5 Exceptions Applicable to the "SERVICE PROVIDER/BIDDER"

The "SERVICE PROVIDER/BIDDER" shall not have the right to consider any of the following circumstances to be an event of Force Majeure that would suspend the performance or excuse the non-performance of its obligations under this Agreement other than the circumstances resulting from an event of Force Majeure:-

- (i) Delay in performance by the "SERVICE PROVIDER/BIDDER", Subcontractor(s), agents and employees of the "SERVICE PROVIDER/BIDDER"; or
- (ii) Breakdown or ordinary wear and tear of materials, equipment machinery or parts relating to the Project.

### 15.6 Exceptions Applicable to the \_\_\_\_\_

The \_\_\_\_\_ Authority shall not have the right to consider any of the following circumstances to be an event of Force Majeure that would suspend the performance or excuse the non-performance of its obligations under this Agreement:

- (i) The appropriation, confiscation, nationalisation or requisition of the h Project, Project Assets by the \_\_\_\_\_:
- (ii) The imposition of any blockade, embargo, import restrictions, rationing or allocation by the \_\_\_\_\_ or any Competent Authority; or
- (iii) Change of Governments or administrators of \_\_\_\_\_.

### 14.7 Effect of Force Majeure after Compliance Date

Upon occurrence of any Force Majeure Event after the Compliance Date, the following shall apply:

- (i) There shall be no Termination of this Agreement except as provided in Articles 15.9, 15.10 and 15.11.
- (ii) Where the Force Majeure Event occurs after the Compliance Date the critical time limits set forth in this Agreement shall be extended by the period for which such Force Majeure Event shall subsist;
- (iii) All cost arising out or concerning such Force Majeure Event shall be borne in accordance with provisions of Article 15.8.

### **15.8 Allocation of costs during the subsistence of Force Majeure**

Upon occurrence of a Force Majeure Event after Compliance Date, the cost arising out of such event shall be allocated as follows:

- (i) When the Force Majeure Event is a Non Political Event, the Parties shall bear their respective costs and neither Party shall be required to pay to the other Party any cost arising out of any such Force Majeure Event;
- (ii) Where the Force Majeure Event is an Indirect Political Event, the costs attributable to such Force Majeure Event and directly relating to the Project (the Force Majeure Costs), shall be reimbursed by the \_\_\_\_\_ to the "SERVICE PROVIDER/BIDDER" within 30 (thirty) days from the date of receipt of SERVICE PROVIDER/BIDDER's claim therefore:
- (iii) Where the Force Majeure Event is a Political Event, the Force Majeure Costs to the extent actually incurred and duly certified by the Statutory Auditors shall be reimbursed by the \_\_\_\_\_ to the "SERVICE PROVIDER/BIDDER" in one lump sum not later than 30 (thirty) days after the end of the Force Majeure Event and receipt of notice by the "MUNICIPALITY" to that effect.

### **15.9 Termination Notice**

If the Force Majeure Event subsists for a period of 270 (two hundred seventy days or more within a continuous period of 365 (three hundred sixty five) days either Party may in its sole discretion terminate this Agreement by giving 30 (thirty) days Termination Notice in writing to the other Party without being liable any manner whatsoever, save and except as per the provisions of in Article 15

### **15.10 Termination Payments for Force Majeure Events**

Upon Termination of this Agreement pursuant to Article 15.9, the Termination Payment to the "SERVICE PROVIDER/BIDDER" shall be made in accordance with the following:

- (i) If the Termination is on account of Non Political Event, the "SERVICE PROVIDER/BIDDER" shall be entitled to receive from the \_\_\_\_\_ by way of Termination Payment an amount equal to 90% (ninety percent) of the consideration of the project as specified in Article-4



of this Agreement minus the amounts paid till termination of the Agreement minus the interest not applicable for the balance period of the Agreement after termination.

- (ii) If the Termination of this Agreement is on account of an Indirect Political Event, the "SERVICE PROVIDER/BIDDER" shall be entitled to receive from the "MUNICIPALITY" by the way of Termination Payment an amount equal to the consideration of the project as specified in Article 4 of this Agreement minus the interest not applicable for the balance period of Agreement after termination.
- (iii) If the Termination of this Agreement is on account of a Political Event, the "SERVICE PROVIDER/BIDDER" shall be entitled to receive from the \_\_\_\_\_ Authority by the way of Termination Payment an amount equal to the consideration of the project as specified in Article 4 of this Agreement minus the amounts paid till termination of the Agreement minus the interest not applicable for the balance period of the Agreement after termination.

### **15.11. Termination Payments**

The Termination Payments pursuant to the Article 15.10 shall become due and payable to the "SERVICE PROVIDER/BIDDER" by the \_\_\_\_\_ in one lump sum not later than 30 (thirty) days after the end of the Force Majeure Event and notice of the \_\_\_\_\_ to that effect.

### **15.12 Dispute Resolution**

In the event that the Parties are unable to agree in good faith about the occurrence or existence of a Force Majeure Event, such dispute shall be finally settled in accordance with the Dispute Resolution procedure as under Article 16 provided however that the burden of proof as to the occurrence or existence such Force Majeure event shall be upon Party claiming relief and/or excuse the account of such Force Majeure Event.

### **15.13 Duty to Report**

The Affected Party shall discharge the following obligations in relation to reporting the occurrence of a Force Majeure Event to the other Party:

- (i) The Affected Party shall not claim any relief for or in respect of a Force Majeure Event unless it shall have notified the other party in writing of the occurrence of the Force Majeure Event as soon as reasonably practicable, and in any event within 15 (fifteen) days after the Affected Party knew or ought reasonably to have known of its occurrence and the probable Material Adverse Effect that the Force Majeure Event is likely to have occurred on the performance of its obligations under this Agreement.
- (ii) Any notice pursuant to this Article 15.13 shall include full particulars of:

- (a) The nature and extent of each Force Majeure Event which is the, subject of any claim for relief under this Article with evidence in support thereof;
  - (b) The estimated duration and effect or probable effects which such Force Majeure Event is having or will have on the Affected Party's performance of its obligations under this Agreement;
  - (c) The measure which the Affected Party is taking or proposes to take to alleviate the impact of such Force Majeure Event; and
  - (d) Any other information relevant to the Affected Party's Claim.
- (iii) For so long as the Affected Party continues to claim to be affected by such Force Majeure Event, it shall provide the other Party with regular (and not less than weekly) written reports containing information as required by this Article, and such other information as the other Party may reasonably request the Affected Party to provide.

#### **15.14 Excuse from performance of obligations**

If the affected Party is wholly or partially unable to perform its obligations under this Agreement because of Force Majeure Event, it shall be excused from performance of such of its obligations to the extent it is unable to perform on account of such Force Majeure Event provided that:

- (i) The suspension of performance shall be no more than scope and duration then is reasonably required by the Force Majeure Event;
- (ii) The Affected Party shall make all reasonable efforts to mitigate or limit damage to the other Party arising out of or as a result of the existence or occurrence of such Force Majeure Event and to cure the same with due diligence; and
- (iii) When the Affected Party is able to resume performance of its obligations under this Agreement, it shall give to the other Party written notice to that effect and shall promptly resume performance of its obligations hereunder;

### **ARTICLE 16: DISPUTE RESOLUTION**

#### **16.1 Dispute Resolution**

Any dispute, difference or controversy of whatever nature regarding the validity, interpretation, implementation or the rights and obligations arising out of, or in relation to, or howsoever arising under or in relation to this Agreement between the Parties, and so notified by either Party to the other Party (the "Dispute") shall subject to the dispute resolution procedure set out in this Article. It is specially clarified here that in case of any ambiguity regarding the works, the practices existing at the time of submission of the proposal as per Good Industry Practice would prevail.

## 16.2 Direct discussion between Parties

The Parties agree that any Dispute that may arise between them shall be first submitted for direct discussion between the Parties. For this purpose, the notice of Dispute (the "Notice of Dispute") sent by one Party to the other Party under Article 16.1 shall be considered as invitation for direct discussion, and it should specify a reasonable time and venue for the conducting of negotiation proceedings. In addition, the Notice of Dispute shall specify the basis of the Dispute and the amount claimed. In the direct discussion proceedings, each Party shall be represented by their representatives/officials or employees with sufficient knowledge and authority over the subject matter of the Dispute in order to have a meaningful discussion. At the discussion proceedings, the Party that has given the Notice of Dispute shall present an offer of settlement, which may form the starting point of discussions between the two Parties during the discussion proceedings.

The direct discussion meeting as stated above will be held at the Office of the Project In-charge, (Name of Municipal Corporation). The proceedings of this meeting shall be minuted by the Project In-charge..... (Name of Municipal Corporation).

## 16.3 Arbitration or Adjudication

- (i) In the event that the parties are unable to resolve the Dispute through Direct Discussion under Article 16.2, the Parties shall submit the Dispute for arbitration in accordance with the Arbitration and Conciliation Act, 1996. There shall board of 3 (three) arbitrators of whom 1 (one) shall be appointed by the Municipality, 1 (one) shall be appointed by the "SERVICE PROVIDER/BIDDER" and the third appointed by the 2 (two) arbitrators appointed as aforesaid.
- (ii) The arbitration proceedings shall be conducted in the English language only.
- (iii) The cost incurred on the process of arbitration including inter alia the fees of the arbitral tribunal and the cost of the proceedings shall be borne by the in equal proportions. Each Party shall bear its own legal fees incurred as of any Dispute under this Article.
- (iv) The arbitration proceeding shall be conducted in..... (Name of STATE).
- (v) If any dispute goes to the court of law, the jurisdiction of the court shall be the District Court, City.

## 16.4 Performance during Dispute

Performance of this Agreement shall continue during the settlement of any Dispute under this Article. The provisions for dispute settlement shall be binding upon the successors, assigns and any trustee or receiver or either the Municipality or the "SERVICE PROVIDER/BIDDER".

## **ARTICLE 17: Confidentiality**

Neither of the Parties shall, at any time, before the expiry or termination of this Agreement, without the consent of the other Party, divulge or suffer or permit its officers, employees, or agents to divulge to any person (other than to any of their respective officers or employees who require the same to enable the properly to carry out their duties), any information relating to the negotiations concerning the operations, contracts, commercial or financial arrangements of affairs of the other Party or any proprietary information of the other Party.

## **ARTICLE 18: Carbon Credits**

Due to the Energy Efficiency Measures, the Project may qualify for registering with UNFCCC (United Nations Framework Convention on Climate Change) under CDM (Clean Development Mechanism). The Municipality shall have the right to submit the Project for approval and certification under the Clean Development Mechanism (CDM) Regime of the Kyoto Protocol and to sell the Certified Emission Reductions generated.

The Municipality shall have exclusive rights over the revenues accruing from such CDM transactions and the "SERVICE PROVIDER/BIDDERS" shall not have any claim over them.

## **ARTICLE 19: COMPLETION OF THE AGREEMENT:**

The present agreement will be considered completed or deemed completed:

- (i) After xx months from the date of installation of the equipment by the "SERVICE PROVIDER/BIDDER" and on receipt of the total project value from the Municipality, or
- (ii) On the day the "SERVICE PROVIDER/BIDDER" receives complete termination payment in terms of Article-14 of this agreement, or
- (iii) On the day the "SERVICE PROVIDER/BIDDER" receives complete termination payment in terms of Articles-15.10 and 15.11 of this agreement.

Immediately on completion of this Agreement the Municipality shall issue an Agreement Completion Certificate' to the "SERVICE PROVIDER/BIDDER" discharging them from any liability or obligations in terms of this Agreement.

Upon completion of this agreement either of Party is precluded from invoking the provisions of this agreement and the agreement becomes automatically inoperative and not enforceable any further.

## **ARTICLE 20: MISCELLANEOUS PROVISIONS**

### **20.1 Governing Law and Jurisdiction**

This Agreement shall be construed and interpreted in accordance with and governed by the laws of India and the Courts of..... (Name of STATE) shall have jurisdiction over all matters arising out of or relating to this Agreement.

### **20.2 Severability**

If for any reason whatsoever, any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other legal and valid instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties will negotiate in good faith with a view to agreeing upon one or more provisions, which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable. Provided failure to agree upon any such provisions shall not be a subject matter to dispute resolution under this Agreement or otherwise.

### **20.3 Entire Agreement**

This Agreement and the Annexures referred therein together constitute a complete and exclusive statement of the terms and conditions of the agreement between the Parties on the subject hereof and no amendment or modification hereto shall be valid and effective unless such modification or amendment is agreed to in writing by the Parties and duly executed by persons especially empowered in this behalf by the respective Parties.

### **20.4 Compliance with Laws and Directives**

The "SERVICE PROVIDER/BIDDER" shall, in all matters arising in the performance of this Agreement, comply with, give all notices under, and pay all taxes, levies and other similar charges required by the provisions of any Central or State law or directive or any regulation of any legally constituted public authority having jurisdiction over the Works. The Municipality and the "SERVICE PROVIDER/BIDDER" shall comply with all the laws as applicable.

## 20.5 Notifications

- (i) Wherever provision is made for the giving or issuance of any notice, instruction, consent, approval, certificate or determination by any Person, unless otherwise specified, such communication shall be in writing and shall not be unreasonably withheld or delayed. Wherever provision is made for a communication to be “written” or “in writing”, this means any hand-written, typewritten or printed communication, including the agreed systems of electronic transmission.
- (ii) All certificates, notices or written orders between the Parties shall either be delivered by hand against written acknowledgement of receipt, or be sent by registered acknowledgement due pre-paid post or courier or one of the agreed systems of electronic transmission. In the event of any dispute, unless such acknowledgement of receipt is provided, the communication shall be treated as not given.
- (iii) In the case of the “SERVICE PROVIDER/BIDDER”, all communication shall be marked for the attention of the person and to the address provided below, or to such other person or address as may be intimated to the Municipality by the “SERVICE PROVIDER/BIDDER” from time to time.

Name of SERVICE PROVIDER/BIDDER’s Representative: \_\_\_\_\_

Address for communication: \_\_\_\_\_

- (iv) In the case of the .....(Name of Municipality) all communication shall be addressed to:

Name of Municipality’s Representative: \_\_\_\_\_

Address for communication: \_\_\_\_\_

## 20.6 Language

The language of this Agreement is the English language. All correspondence, drawings, designs, design data, Tests reports, certificates, specifications and information shall be in the English language. All other written and printed matter required for Implementation, operation and maintenance shall be executed in the English language. Instructions and notices to the public and staff and all other signs and information’s notices shall be in English.

In witness whereof the Parties have executed this Agreement as of the date first above written.

SIGNED AND DELIVERED BY the .....(Name of Municipal Corporation), by the hand of

Mr./Ms. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_, its \_\_\_\_\_  
\_\_\_\_\_

An authorised officer.

SIGNED AND DELIVERED BY the SERVICE PROVIDER/BIDDER, pursuant to the Resolution of its Board of Directors passed in that behalf on \_\_\_\_\_ 2013, by the hand of

Mr./Ms. \_\_\_\_\_  
Its \_\_\_\_\_

An authorised officer.

Annexure – 01

## General Specifications

### 1. GENERAL REQUIREMENTS

- a. High Power White LEDs are used in the luminaries and the Wattage of these LEDs would be greater than ONE watt.
- b. LED will be operated at a forward current of less than 90% of the rated current.
- c. Color Rendering Index (CRI) of the LEDs used in the luminaire will be greater than 70.
- d. The illumination of the luminaire will be uniform without dark bands or abrupt variations and soothing to the eye.
- e. Light Uniformity Ratio ( $E_{min} / E_{avg}$ ) would be  $> 0.4$
- f. Luminary Body Temperature would be less than 30°C above the ambient, even after continuous burning of Luminary for 24 Hrs
- g. The Luminaire works on single phase three wire system (Phase, Neutral & Earth).

### 2. CONSTRUCTION

- a. The luminaire housing is made up of Corrosion free High Pressure Aluminum die cast thus confirming the luminaire to IP-68 protection and safety as per IEC 605981 IS 10312.
- b. The Luminaire is equipped with distortion free, clear, Heat Resistant Toughened, UV stabilized Glass cover in the front fixed to the die cast Aluminum frame which would be fixed to the housing by means of stainless steel screws.

**Annexure – 02****Specifications of XXW LED Street Light****1. ELECTRICAL PARAMETERS**

- a. AC input Operating Voltage range : 90V to 300V AC
- b. AC Input Operating frequency range : 47 ~ 53Hz
- c. Nominal Operating Voltage : 230V AC
- d. Nominal Operating frequency : 50 Hz
- e. Nominal Power Consumption : XXW  $\pm$  5%
- f. Power Factor : > 0.9
- g. Total Harmonic Distortion (THD) : < 15%

**2. MECHANICAL PARAMETERS**

- a. Construction of Casing : High Pressure Die Cast Aluminum
- b. Finish : Powder Coating with Silver color
- c. Luminaire Cover : Toughened Glass
- d. IP Level : IP 68
- e. Mounting bracket diameter (inner) : 34.4 to 42.4mm
- f. Recommended pole height : 6 mtrs
- g. Recommended Tilt : 5 ~ 15°
- h. Recommended Arm Length : 1 mtr.

**3. OPTICAL PARAMETERS**

- a. Correlated Color Temperature (CCT) : 5000K to 7000K
- b. Luminaire efficacy : >70 lm/W



**Annexure – 03****Specifications of XXW LED Street Light****1. ELECTRICAL PARAMETERS**

- a. AC input Operating Voltage range : 90V to 300V AC
- b. AC Input Operating frequency range : 47 ~ 53Hz
- c. Nominal Operating Voltage : 230V AC
- d. Nominal Operating frequency : 50 Hz
- e. Nominal Power Consumption : XXW  $\pm$  5%
- f. Power Factor : > 0.9
- g. Total Harmonic Distortion (THD) : < 15%

**2. MECHANICAL PARAMETERS**

- a. Construction of Casing : High Pressure Die Cast Aluminum
- b. Finish : Powder Coating with Silver color
- c. Luminaire Cover : Toughened Glass
- d. IP Level : IP 68
- e. Mounting bracket diameter (inner) : 34.4 to 42.4mm
- f. Recommended pole height : 7 mtrs
- g. Recommended Tilt : 5 ~ 15°
- h. Recommended Arm Length : 1 mtr.

**3. OPTICAL PARAMETERS**

- a. Correlated Color Temperature (CCT) : 5000K to 7000K
- b. Luminaire efficacy : >70 lm/W

**Annexure – 04****Specifications of XXW LED Street Light****1. ELECTRICAL PARAMETERS**

- a. AC input Operating Voltage range : 90V to 300V AC
- b. AC Input Operating frequency range : 47 ~ 53Hz
- c. Nominal Operating Voltage : 230V AC
- d. Nominal Operating frequency : 50 Hz
- e. Nominal Power Consumption : XXW  $\pm$  5%
- f. Power Factor : > 0.9
- g. Total Harmonic Distortion (THD) : < 15%

**2. MECHANICAL PARAMETERS**

- a. Construction of Casing : High Pressure Die Cast Aluminum
- b. Finish : Powder Coating with Silver color
- c. Luminaire Cover : Toughened Glass
- d. IP Level : IP 68
- e. Mounting bracket diameter (inner) : 34.4 to 42.4mm
- f. Recommended pole height : 7 mtrs
- g. Recommended Tilt : 5 ~ 15°
- h. Recommended Arm Length : 1 mtr.

**3. OPTICAL PARAMETERS**

- a. Correlated Color Temperature (CCT) : 5000K to 7000K
- b. Luminaire efficacy : >70 lm/W

**Annexure – 05****Specifications of XXW LED Street Light****1. ELECTRICAL PARAMETERS**

- a. AC input Operating Voltage range : 90V to 300V AC
- b. AC Input Operating frequency range : 47 ~ 53Hz
- c. Nominal Operating Voltage : 230V AC
- d. Nominal Operating frequency : 50 Hz
- e. Nominal Power Consumption : XXW  $\pm$  5%
- f. Power Factor : > 0.9
- g. Total Harmonic Distortion (THD) : < 15%

**2. MECHANICAL PARAMETERS**

- a. Construction of Casing : High Pressure Die Cast Aluminum
- b. Finish : Powder Coating with Silver color
- c. Luminaire Cover : Toughened Glass
- d. IP Level : IP 68
- e. Mounting bracket diameter (inner) : 34.4 to 42.4mm
- f. Recommended pole height : 7 mtrs
- g. Recommended Tilt : 5 ~ 15°
- h. Recommended Arm Length : 1 mtr.

**3. OPTICAL PARAMETERS**

- a. Correlated Color Temperature (CCT) : 5000K to 7000K
- b. Luminaire efficacy : >70 lm/W

**Annexure – 06****Specifications of XXW LED Street Light****1. ELECTRICAL PARAMETERS**

- |    |                                    |   |                |
|----|------------------------------------|---|----------------|
| a. | AC input Operating Voltage range   | : | 90V to 300V AC |
| b. | AC Input Operating frequency range | : | 47 ~ 53Hz      |
| c. | Nominal Operating Voltage          | : | 230V AC        |
| d. | Nominal Operating frequency        | : | 50 Hz          |
| e. | Nominal Power Consumption          | : | XXW $\pm$ 5%   |
| f. | Power Factor                       | : | > 0.9          |
| g. | Total Harmonic Distortion (THD)    | : | < 15%          |

**2. MECHANICAL PARAMETERS**

- |    |                                   |   |                                  |
|----|-----------------------------------|---|----------------------------------|
| a. | Construction of Casing            | : | High Pressure Die Cast Aluminum  |
| b. | Finish                            | : | Powder Coating with Silver color |
| c. | Luminaire Cover                   | : | Toughened Glass                  |
| d. | IP Level                          | : | IP 68                            |
| e. | Mounting bracket diameter (inner) | : | 34.4 to 42.4mm                   |
| f. | Recommended pole height           | : | 7 mtrs                           |
| g. | Recommended Tilt                  | : | 5 ~ 15°                          |
| h. | Recommended Arm Length            | : | 1 mtr.                           |

**3. OPTICAL PARAMETERS**

- |    |                                    |   |                |
|----|------------------------------------|---|----------------|
| a. | Correlated Color Temperature (CCT) | : | 5000K to 7000K |
| b. | Luminaire efficacy                 | : | >70 lm/W       |

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## Template of Bank Guarantee

(To be stamped as per the Stamp Laws as applicable in the State where the Bank Guarantee is signed subject to a minimum of Rs. 100/-)

## BANK GUARANTEE

THIS DEED OF GUARANTEE executed at \_\_\_\_\_ this day, the \_\_\_\_ of \_\_\_\_\_ 2013, by

\_\_\_\_\_  
(Name of the Bank)

\_\_\_\_\_  
(Address of the Bank)

(Hereinafter referred to as the “Guarantor”, (which expression shall include its successor or successors) in favour of ..... (Name of Bank) constituted under the..... (Concerned Bank Act) having its Central Office at..... and amongst other places, a Branch at..... (Name of Bank), (Branch) hereinafter referred to as ‘.....’ (Which expression shall include its successors or assigns).

WHEREAS the .....(Name of Municipal Corporation), having its office at .....  
....., an Urban Local Body (ULB) of Government of .....(Name of State) (hereinafter referred to as “MC”), acting through its representative \_\_\_\_\_ entered into an agreement with .....(Name of Service Provider/Bidder), a limited company registered under the Companies Act, 1956 (1 of 1956) and having its Registered Office at .....  
..... (hereinafter referred to as the “Service Provider/Bidder”), (which expression shall include its successor or successors and assigns). In terms of the said Agreement the project contract to replace the existing .....no.s street lights with modern LED Luminaries was awarded to the “Service Provider/Bidder” by the “MC” on deferred payment basis spreading over the agreement period of ..... months.

WHEREAS the “MC” is under obligation to pay money a total sum of Rs \_\_\_\_\_ to the “Service Provider/Bidder” for supplying and maintenance of LED Street Lights on deferred payment mode. The “Service Provider/Bidder” informed the “MC” that they entered into a separate agreement with the “..... (NAME OF BANK)” for making repayment of loans availed of by them, besides other sources to liquidate .....(NAME OF BANK) loan, the money to be received from the “MC” and accordingly requested the “MC” to issue the financial security in the form of Bank Guarantee in favour of the “.....(NAME OF BANK)”.

WHEREAS the “MC” approached “Guarantor” for issuing the present guarantee for Rs.xx.00 (Rupees xx (in words) only) in favour of the “..... (NAME OF BANK)”.

AND WHEREAS, the “Guarantor” has, at the request of the “MC”, agreed unconditionally and irrevocably to guarantee the “..... (NAME OF BANK)” to pay on demand in full or part of this guaranteed amount of Rs. xx towards repayment obligation of the “MC”.

And Whereas in consideration of..... (NAME OF BANK) having at the request of Service Provider/Bidder and against the security of this Bank Guarantee, sanctioned various credit facilities to Service Provider/Bidder for execution of the said project based on various terms and conditions as mentioned in arrangement letters, loan documents and other communications from time to time, the Guarantor hereby agree and declare that:

Now, therefore, the “Guarantor” hereto agrees as follows:

1. The “Guarantor” absolutely, unconditionally and irrevocably guarantees the “..... (NAME OF BANK)” to pay on demand in full or part of this guaranteed amount of Rs. xx in the event of default or nonpayment for whatever reason by the “MC” to pay the “Service Provider/Bidder” and / or “..... (NAME OF BANK)” the agreed monthly installments and other monies whatsoever becoming due and payable without demur.
2. The Guarantor undertake to indemnify .....(NAME OF BANK) and keep .....(NAME OF BANK) indemnified from time to time to the extent of Rs \_\_\_\_\_ against any loss or damage or costs caused to or suffered by or that may be caused or suffered by ..... (NAME OF BANK) by reason of any breach or breaches on the part of “MC” and or “Service



Provider/Bidder” of any of the terms and conditions contained in the respective undertakings and loan agreements and in the event “MC” and or “Service Provider/Bidder” make any defaults in carrying out their obligations or performances of any terms and conditions relating thereto, the Guarantor shall forthwith without any protest or demur pay to .....(NAME OF BANK) such sum or sums not exceeding in total the said sum of Rs. \_\_\_\_\_ as may be claimed by .....(NAME OF BANK) as its losses and / damages, dues, costs, charges or expenses by reason of such default / defaults on the part of “MC” and or “Service Provider/Bidder”.

3. The Guarantor will hold harmless and indemnify the .....(NAME OF BANK) against and will pay to the .....(NAME OF BANK) on demand at .....(NAME OF BANK, AT CONCERNED BARNCH) the amount of costs, claims, demands, damages, losses, expenses which may be made against or sustained by the .....(NAME OF BANK) or for which the .....(NAME OF BANK) may become liable by reason of the Guarantor having given and signed the said guarantee or otherwise in connection therewith AND the Guarantor also agree to pay to the .....(NAME OF BANK, AT CONCERNED BARNCH) forthwith together with all costs and charges which may be incurred by the .....(NAME OF BANK).
4. Notwithstanding anything to the contrary, the decision of .....(NAME OF BANK) as to whether the Service Provider/Bidder or MC has made any default or defaults and the amount or amounts to which .....(NAME OF BANK) is entitled to by reason thereof shall be binding on the Guarantor and the Guarantor shall not be entitled to ask the .....(NAME OF BANK) to establish its claim under the Guarantee but will pay the same on demand from .....(NAME OF BANK) without any objection.
5. The .....(NAME OF BANK) -- shall have the fullest liberty to claim payment of the amount or amounts from time to time under the guarantee subject to the ceiling limit of Rs \_\_\_\_\_ as referred to above and this guarantee shall not become invalid or infructuous because of the partial demand made by the .....(NAME OF BANK) upon the Guarantor for payment under the circumstances stipulated herein and this guarantee shall hold good in favour of the .....(NAME OF BANK) to the extent of the balance amount

to have become liable on the date or dates on which the borrower shall become liable to pay the amount/amounts due under the said Agreement of Loan and/or any of the said security documents as a result of such variation or composition or agreement.

9. The "Guarantor" agrees and undertakes to execute, sign, seal and deliver all documents, papers, acknowledgements and other writings as may be required by the "..... (NAME OF BANK)" at any time during the period the Guarantee is in force with a view to more fully and effectively securing the monies due and payable by the "Guarantor" to the ".....(NAME OF BANK)" in terms of this Agreement of Guarantee.
10. The "Guarantor" shall pay or cause to be paid all taxes, charges, and fees now or hereafter imposed on or in connection with the execution, delivery recording or registration of this Agreement of Guarantee, the obligation evidenced hereby or payment hereunder.
11. The "Guarantor" shall not assign or transfer this Agreement of Guarantee without having first obtained the written consent of the "..... (NAME OF BANK)" and the "Service Provider/Bidder." All rights and liabilities herein given to, or imposed upon, the respective parties hereto shall extend to and bind their several and respective successors.
12. The Guarantee hereby given is independent and distinct from any security that the ..... (NAME OF BANK) has taken or may take in any manner whatsoever whether it be by way of hypothecation pledge and/or mortgage and /or any other charge over goods, movables or other assets and/or any other property movable or immovable and that the Guarantors have not given this guarantee upon any understanding faith or belief that the .....(NAME OF BANK) has taken and/or may hereafter take any or other such security and that notwithstanding the provisions of Sections 140 and 141 of the Indian Contract Act, 1872 or other section of that Act or any other law, the guarantors will not claim to be discharged to any extent because of the .....(NAME OF BANK)'s failure to take nay or other such security or in requiring or obtaining any or other such security or losing for any reason whatsoever including reasons attributable to its defaults and negligence benefit of any or other such security or any of rights to any or other such security that have been or could have been taken.

13. The "Guarantor" hereby agrees that, on demand by the "..... (NAME OF BANK)" the "Guarantor" shall make payments to the "..... (NAME OF BANK)" under this Agreement at..... .
14. Notwithstanding the .....(NAME OF BANK)'s rights under any security which the .....(NAME OF BANK) may have obtained or may obtain the .....(NAME OF BANK) shall have fullest liberty to call upon the Guarantors to pay the sum not exceeding Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) together with interest as well as the costs (as between advocate and client) charges and expenses, and /or other monies for the time being due to the Bank in respect of or under the above mentioned credit facilities or any of them without requiring the Bank to realise from the Service Provider/Bidder and / or MC the amount due to the Bank in respect of the above mentioned credit facilities and /or requiring the Bank to enforce any remedies or securities available to the Bank. The Guarantor agree that notwithstanding the..... (NAME OF BANK) for any reason whatsoever losing and/or parting with any of the securities given by the Service Provider/Bidder the Guarantor shall not be released or discharged of their obligations under this Guarantee and in the event of the ..... (NAME OF BANK) so losing or parting with a security the guarantor shall be deemed to have consented to or acquiesced in the same.
15. In order to give full effect to the guarantee herein contained the .....(NAME OF BANK) shall be entitled to act as if the Guarantors were the principal debtors of .....(NAME OF BANK) in respect of all claims of .....(NAME OF BANK) made against the Service Provider/Bidder hereby guaranteed by the Guarantor as aforesaid and the Guarantor hereby expressly waive all rights of surety ship and other rights, if any, which are in any way inconsistent with the above or any other provision of this Guarantee.
16. The Guarantee shall be irrevocable and enforceable against the Guarantors notwithstanding any dispute between the..... (NAME OF BANK) and Service Provider/Bidder or Service Provider/Bidder and MC.
17. Notwithstanding anything contained contrary in any agreement(s) and including this one, the Guarantor has nothing to do with the Agreements between either .....(NAME OF BANK)

and Service Provider/Bidder or Service Provider/Bidder and MC or .....(NAME OF BANK) and MC and the Guarantor shall have no right even to refer to the terms and conditions contained in such agreement(s) whenever any invocation is made by the .....(NAME OF BANK) and the Guarantor shall make payment of guaranteed sum as per the invocation(s) without any demur or objection.

18. The Guarantors affirm confirm and declare that any balance confirmation and/or acknowledgment of debt and/or admission of liability given or promise or part payment made by the Service Provider/Bidder or MC or their authorised agent(s) the..... (NAME OF BANK) shall be deemed to have been made and /or given by or on behalf of the Guarantors themselves and shall be binding on them. The Guarantors agree that any admission or acknowledgement in writing signed by the Service Provider/Bidder of the liability or indebtedness of the Service Provider/Bidder or otherwise in relation to the above mentioned credit facilities and or any part payment as may be made by the Service Provider/Bidder towards the Principal, sum hereby guaranteed or any judgment, award or order obtained by the Bank against the Service Provider/Bidder shall be binding on the Guarantors and the Guarantors accept the correctness of any statement of account that may be served on the Service Provider/Bidder which is duly certified by any Officer of the Bank and the same shall be binding and conclusive as against the Guarantors also and the Guarantors further agree that in the Service Provider/Bidder making an acknowledgement or making a payment the-Borrower shall in addition to their capacity be deemed to act as the Guarantors duly authorised agent in that behalf for the purposes of Sections 18 and 19 of the Limitation Act of 1963.
19. The Guarantor agree that if the Service Provider/Bidder being a company enters into liquidation or winding up (whether compulsory or voluntary) or if the management of the undertaking of the Service Provider/Bidder is taken over under any law or if the Service Provider/Bidder or make any arrangement or composition with creditors the .....(NAME OF BANK) may (notwithstanding payment to the Bank by the Guarantors or any other person of the whole or any part of the amount hereby secured) rank as creditor and prove against the estate of the Service Provider/Bidder for the full amount of all the Bank's claims against the Service Provider/Bidder or agree to and accept any composition in respect thereof and the .....

(NAME OF BANK) may receive and retain the whole of the dividends, composition or other payments thereon to the exclusion of 'all the rights of the Guarantors in competition with .....(NAME OF BANK) until all the .....(NAME OF BANK)'s claims are fully satisfied and the Guarantors will not be paying off the amounts payable by them or any part thereof or otherwise prove or claim against the estate of the Service Provider/Bidder until the whole of the .....(NAME OF BANK)'s claims against the Service Provider/Bidder have been satisfied and the .....(NAME OF BANK) may enforce and recover payment from the Guarantors of the full amount payable by the Guarantors notwithstanding any such proof or composition as aforesaid.

20. All communications or notices under this Agreement shall be in writing or sent by telegram and shall be deemed to have been delivered upon receipt by the parties hereto at the following address:

To "Guarantor":

Mail Address:

Telegraphic Address:

To the " \_\_\_\_\_ (NAME OF BANK)":

Mail Address: \_\_\_\_\_

To the "Service Provider/Bidder":

Mail Address: \_\_\_\_\_

To the "MC":

Mail Address: \_\_\_\_\_

21. Notwithstanding anything contained herein:-

- (i) Our liability under this Bank Guarantee is restricted Rs. xx crore (Rupees xx(in words) Only)
- (ii) Our Guarantee shall remain in force until \_\_\_\_\_
- (iii) Unless a demand or claim under the guarantee is made on our Bank in writing on or before \_\_\_\_\_ all yours rights under the said guarantee be forfeited and we shall be relieved and discharged from all liabilities there under.

IN WITNESS WHEREOF, the "Guarantor" has caused S/Shri \_\_\_\_\_ to hereto set his/their hand for and on its behalf on this Agreement of Guarantee on the day, month and year first above written.

Signed and Delivered by

Shri \_\_\_\_\_  
\_\_\_\_\_

for and behalf of the

(Name of the Bank)

\_\_\_\_\_

In the presence of

1.

2.





## Energy Efficiency Services Limited

**Corporate Office:**

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NBCC Tower, 15 Bhikaji Cama Place  
New Delhi 110066  
Phone: 011-26173275-76  
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