



उड़ीसा ORISSA

F 300297

THIS STAMP PAPER FORMS INTEGRAL PART OF THE ENERGY PERFORMANCE CONTRACT

DATED 5 OCTOBER, 2013

BETWEEN

BHUBANESWAR MUNICIPAL CORPORATION

AS "BMC"

AND

SUPER WEALTH FINANCIAL ENTERPRISES PRIVATE LIMITED

AS "ESCO" OR THE "CONTRACTOR"

*Sundhar*  
*5/10/13*  
Municipal Commissioner  
BHUBANESWAR MUNICIPAL CORPORATION



*M. K. Mahapatra*  
*05/10/13*

30093

883 1007

Case No. B.M.-

Ad  
8/8/13

*[Signature]*

SIBARAM SAHOO  
Camp Vendor, Civil Court  
BHUBANESWAR.

DISTRICT TREASURY  
KHURDA, BHUBANESWAR  
27 JUL 2013  
ADDL. TREASURY OFFICER





उड़ीसा ORISSA

F 386183

THIS STAMP PAPER FORMS INTEGRAL PART OF THE ENERGY PERFORMANCE CONTRACT

DATED 5<sup>th</sup> OCTOBER, 2013

BETWEEN

BHUBANESWAR MUNICIPAL CORPORATION

AS "BMC"

AND

SUPER WEALTH FINANCIAL ENTERPRISES PRIVATE LIMITED

AS "ESCO" OR THE "CONTRACTOR"

Smrhm  
5/10/13  
Bhubaneswar Municipal Corporation  
Bhubaneswar



~~197669~~ 05/10/2013

00

Commissioner Bhubaneswar  
Municipal Corporation

DISTRICT TREASURY  
KHURDA BHUBANESWAR  
28 SEP 2013

0000

0000

B.D.M.  
SIGNATURE OF PURCHASER.....

BALABHADRA PAD  
STAMP VENDU  
BHUBANESWAR COURT.





उड़ीसा ORISSA

F 300298

THIS STAMP PAPER FORMS INTEGRAL PART OF THE ENERGY PERFORMANCE CONTRACT

DATED 5 OCTOBER, 2013

BETWEEN

BHUBANESWAR MUNICIPAL CORPORATION

AS "BMC"

AND

SUPER WEALTH FINANCIAL ENTERPRISES PRIVATE LIMITED

AS "ESCO" OR THE "CONTRACTOR"

Singh  
5/10/13

Municipal Corporation  
BHUBANESWAR MUNICIPAL CORPORATION



05/10/13

30092

8813 100

Credit Mr B



Rs  
818113

*[Signature]*  
LMP 8813  
BANKAM SAHOO  
Const Vendor, Civil Con  
BHUBANESWAR



## **ENERGY PERFORMANCE CONTRACT**

**Between**

**BHUBANESWAR MUNICIPAL CORPORATION**

**And**

**SUPER WEALTH FINANCIAL ENTERPRISES PRIVATE  
LIMITED**

**Dated 5 October 2013**

*Am*  
5/10

*Dr*  
05/10

---



## TABLE OF CONTENTS

1.	DEFINITIONS AND INTERPRETATION .....	4
2.	TERM AND COMMENCEMENT .....	7
3.	SERVICES .....	8
4.	BMC'S RESPONSIBILITIES .....	9
5.	THE CONTRACTOR'S RESPONSIBILITIES .....	10
6.	TIMELINE FOR IMPLEMENTATION OF THE PROJECT .....	12
7.	ASSET OWNERSHIP .....	14
8.	DELAY LIQUIDATED DAMAGES .....	15
9.	INDEPENDENT ENERGY AUDITOR .....	15
10.	REPRESENTATIONS AND WARRANTIES .....	15
11.	REPRESENTATIVES.....	16
12.	REPORTING .....	16
13.	EMPLOYEES AND TRAINING .....	17
14.	THIRD PARTY CLAIMS.....	17
15.	LIMITATION OF LIABILITY.....	18
16.	REMUNERATION.....	18
17.	PAYMENT SECURITY.....	21
18.	PERFORMANCE GUARANTEE .....	21
19.	THEFT OF ENERGY .....	22
20.	FORCE MAJEURE.....	22
21.	MATERIAL ADVERSE GOVERNMENT ACTION .....	24
22.	TAXES AND DUTIES.....	24
23.	CONFIDENTIALITY .....	24
24.	NOTICE.....	25
25.	INSURANCE.....	25
26.	STEP-IN RIGHTS .....	26
27.	TERMINATION .....	26
28.	SETTLEMENT OF DISPUTES.....	28
29.	TRANSFER.....	29
30.	GOVERNING LAW AND LANGUAGE .....	29
31.	MISCELLANEOUS .....	30

am  
5/1x

05/10



This energy performance contract (the "**Contract**") is made on 5 October 2013 by and between:

1. **Bhubaneswar Municipal Corporation** of the city of Bhubaneswar, State of Odisha, having its registered office at Vivekanda Marg, Bhubaneswar - 751014, Odisha and its legal representative being the Municipal Commissioner, Mr Sanijb Kumar Mishra,

Hereinafter referred to as "**BMC**";

And

2. **Super Wealth Financial Enterprises Private Limited**, a company duly registered in India per the Companies Act of 1956, as amended from time to time, located at c/o Dalal Desai & Kumana Union Co-operative Insurance Building, 2nd Floor, 23, Sir P.M Road, Fort, Mumbai-400 001 and its representative being Mr Manik Kshetrapal, duly authorized,

Hereinafter referred to as "**ESCO**" or the "**Contractor**".

BMC and the Contractor are hereinafter referred to individually as a "**Party**" and collectively as the "**Parties**".

#### WHEREAS:

- A. BMC operates the street lighting infrastructure in the city of Bhubaneswar and wishes to enter into an energy performance contract with a qualified energy service provider that will take over the verified street lighting fixtures in the manner specified in the Contract. The Contractor undertakes the implementation of energy conservation measures, installation of feeder panels for automation and metering, and operation and maintenance of at least seventy per cent (70%) of the street lighting fixtures surveyed and certified by the Third Party Energy Audit within the Project Area (the "**Project**").
- B. The project area in the city of Bhubaneswar comprises the verified street lighting fixtures, which are located either (a) on BMC-erected infrastructure that already has provision for metering, or (b) on CESU poles and connected to the dedicated additional street lighting phase provided for, along with low tension feeders, by CESU and thus can be metered at the end where such low tension feeders emanate (near CESU distribution transformers). In total, there are an estimated nineteen thousand, eight hundred seventy-three (19,873) street lighting fixtures with a connected load of approximately 3.6 MW (the "**Project Area**").
- C. The Contractor submitted a bid in response to the request for proposal issued by BMC. The Contractor proposed the highest percentage value of guaranteed energy savings for the duration of the Project and was thus selected by BMC as the winning bidder.
- D. BMC invited the Contractor to enter into this Contract.



  
05/10

NOW THEREFORE, the Parties agree as follows:

**1. DEFINITIONS AND INTERPRETATION**

**1.1 Definitions**

In this Contract (including the recitals and schedules), the following words and expressions have the following meanings:

**"Annual O&M Fee"** means the product of the O&M Fee and the number of street lighting fixtures taken over by the Contractor under the Project.

**"BMC"** means the Bhubaneswar Municipal Corporation.

**"BMC Event of Default"** has the meaning given in Article 27.2.

**"BMC Representative"** means the person appointed by BMC to represent BMC and communicate with the Contractor.

**"Book Value"** means the book value of the equipment shall mean original cost of the equipment as reduced due to depreciation as per Companies Act 1956 for the respective equipment (from the date of installation to the termination date). The same shall have to be certified by reputable auditor and BMC.

**"CESU"** means the Central Electricity Supply Utility of Odisha, the distribution company supplying electricity to the city of Bhubaneswar.

**"Commencement Date"** has the meaning given in Article 2.3.

**"Consent"** means any permit, consent, approval, authorization, agreement, no objection certificate, waiver or licence which must be obtained by the ESCO in order to perform the Services and for any goods to be transported, imported and exported.

**"Contract"** means this energy performance contract entered into between BMC and the Contractor on the date hereof, including the recitals and schedules, as may be amended from time to time by the Parties.

**"Contractor (or ESCO)"** means Super Wealth Financial Enterprises Private Limited.

**"Contractor Event of Default"** has the meaning given in Article 27.3.

**"Contractor Representative"** means the person appointed by the Contractor to represent the Contractor and communicate with BMC.

**"Contract Year"** means successive periods of twelve (12) calendar months commencing on the Commencement Date.

**"Corrupt Act"** means the act of promising, giving, receiving, or agreeing to receive money or some other item of value with a corrupt aim, or perceived aim, of influencing a public official in the discharge of his official duties; and acts giving rise to criminal liability under Indian Laws.

**"Delay Liquidated Damages"** means an amount per week of delay calculated in accordance with Article 8 in the event the Services are not completed in accordance with the Timeline.

dm  
5/1\*

05/10

**"Effective Date"** means the date on which this Contract and all of its schedules are signed by the duly empowered representatives of both Parties.

**"Energy Baseline"** has the meaning given in Article 5.1.

**"Energy Conservation Measures (ECMs)"** means the installation of new equipment, modification or alteration of the Existing Lighting Facilities by the Contractor and at the Contractor's cost, in the city of Bhubaneswar, or revised operation and maintenance procedures to reduce energy costs by improving efficiency of use.

**"Energy Savings"** means a reduction of energy consumption resulting from the Contractor's ECMs taking into consideration quality of power supply. Energy Savings are determined by comparing the Energy Baseline with the energy consumed (or electrical demand) after ECMs are implemented.

**"Energy Savings Fee"** has the meaning given in Article 16.1.

**"Existing Lighting Facilities"** means all BMC (or CESU wherever relevant) owned street lighting equipment and apparatuses, including, but not limited to, poles, cables, wires, lighting fixtures, fittings, ballasts, lamps, tubes, switching devices and timers within the Project Area.

**"Force Majeure Event"** has the meaning given in Article 20.

**"Financial Year"** means (i) the period commencing on the Commencement Date and ending at midnight on the following March 31; and (ii) thereafter, each period commencing on April 1 and ending on the following March 31, unless this Contract is terminated or expires, in which case the period will end at the end of the Term.

**"Independent Energy Auditor"** means the third party energy auditor appointed by BMC for undertaking the scope of work described under Schedule 4.

**"Laws"** means all current or future (during the Term of the Project) applicable Indian laws, administrative regulations, local regulations, regulations on the exercise of autonomy, special regulations, rules, judicial interpretations and other regulatory documents with legal binding force or any compulsory requirement.

**"Lender"** means a person providing financing to the Contractor in relation to this Project.

**"Material Adverse Effect"** means any material adverse effect on (i) the ability of the Contractor to observe and perform any of its rights and obligations under this Contract under normal circumstances, and/or (ii) the legality, validity, binding nature or enforceability of this Contract.

**"Material Adverse Government Action"** has the meaning given in Article 21.

**"Operation and Maintenance (O&M)"** means all the activities required for operation and maintenance of the street lighting fixtures handed over to the Contractor within the Project Area including, but not limited to, those required for meeting the lighting standards specified in this Contract.

**"O&M Fee"** has the meaning given in Article 16.2.

**"Performance Guarantee"** has the meaning given in Article 18.

**"Phase"** (1, 2, 3 or 4) has the meaning given in Article 6.

**"Project"** has the meaning given in the Recitals.

*Amg/x*



"Project Area" has the meaning given in the Recitals.

"Quoted Guaranteed Energy Savings" means the percentage of guaranteed energy savings that the Contractor offered in its bid for the Term of the Project.

"Required Action" has the meaning given in Article 26.3.

"Services" means the services to be performed by the Contractor pursuant to this Contract and described in Schedule 1.

"Subcontractor" means any person to whom execution of any part of the Services is subcontracted by the Contractor, directly or indirectly, and includes such person's legal successors or permitted assignees.

"Term" means the period starting on the Commencement Date and ending on the tenth (10<sup>th</sup>) anniversary of the Commencement Date (as may be extended in accordance with Article 2.4) or on the Termination Date, whichever is earlier.

"Termination Date" means any date of early termination of this Contract pursuant to Article 27.

"Third Party Energy Audit (TPEA)" means the process of determining the energy baseline consumption norm for each switching point (as per the methodology provided in Schedule 4) and joint verification of the street lighting asset inventory for such switching points by deployment of necessary devices and equipment by the Independent Energy Auditor in the presence of BMC and the Contractor.

"Timeline" means the timeline described in Article 6.

"Value of Guaranteed Energy Savings" means the product of the Energy Baseline consumption (kWh) for street lighting fixtures taken over by the Contractor under the Project and the Quoted Guaranteed Energy Savings.

## 1.2 Interpretation

1.2.1 In this Contract, except where the context requires otherwise:

- (a) The masculine includes the feminine and vice versa;
- (b) The singular includes the plural and vice versa;
- (c) A reference in this Contract to any article, paragraph or schedule is a reference to an article, a paragraph or schedule of this Contract, except where it expressly states the contrary;
- (d) Save where otherwise provided in this Contract, any reference to this Contract or to any other document includes any permitted variation, amendment or supplement to such document;
- (e) The words "include" or "including" are to be understood as being followed by "without limitation" or "but not limited to" whether or not they are actually followed by such words;
- (f) A reference to a person includes firms, partnerships and corporations and their successors and permitted assignees or transferees;

dm  
5/10

dm  
05/10

(g) A reference to any law includes any amendment brought to such law from time to time or any law that may replace or consolidate the same that occurs before or after the Effective Date of this Contract; and

(h) Headings are for convenience of references only.

1.2.2 If there is any discrepancy between the main body of the Contract and its Schedules, the main body shall prevail over the Schedules.

## **2. TERM AND COMMENCEMENT**

### **2.1 Effective Date and Term**

This Contract comes into effect on the Effective Date and expires on the tenth (10<sup>th</sup>) anniversary of the Commencement Date, unless terminated earlier pursuant to Article 27 or extended in accordance with Article 2.4.

### **2.2 Conditions Precedent**

2.2.1 The Parties shall ensure that the following conditions are met, or waived by both Parties, as soon as possible following the Effective Date and in any event no later than sixty (60) days from the Effective Date or such later date as may be agreed by the Parties:

- (a) The Contractor has delivered the Performance Guarantee duly executed in accordance with Article 18.1 and BMC has returned the earnest money deposit;
- (b) The Parties have entered into a Trust and Retention Account Agreement in accordance with Article 17.1 and Schedule 6;
- (c) In accordance with Section 2.2.4 of the request for proposal, the Contractor has paid the International Finance Corporation a fee of seventy five thousand United States Dollars (USD 75,000 only);
- (d) BMC has appointed an Independent Energy Auditor selected following a transparent and competitive tender procedure launched by BMC;
- (e) BMC shall provide the Contractor with space measuring at least fifty-five (55) square meters in BMC's headquarters for an in-house control room to be established by the Contractor;
- (f) BMC shall appoint and notify the Contractor of the name of the BMC Representative;
- (g) The Contractor shall appoint and notify BMC of the name of the Contractor Representative;
- (h) BMC shall provide the Contractor with a letter duly executed granting the Contractor access to all the Existing Lighting Facilities;
- (i) The Parties shall agree on a maximum fixed amount to be paid to the Independent Energy Auditor to undertake the scope of work described in Schedule 4;
- (j) BMC shall ensure that the Housing and Urban Development Department of the Government of Odisha delivers a letter of comfort duly executed in accordance with Article 17.2 and in the form attached in Schedule 8; and

am  
5/1x

05/10

- (k) In accordance with Section 2.2.5 of the request for proposal, the Contractor has paid BMC a fee in Indian Rupees of an amount equivalent to twenty-five thousand United States Dollars (USD 25,000 only).

2.2.2 If the conditions precedent referred to in Article 2.2.1 are not satisfied or waived, as applicable, within sixty (60) days after the Effective Date, the Parties shall meet to discuss how to satisfy the outstanding conditions. If the Parties cannot agree on a timetable to complete the outstanding conditions within thirty (30) days of the first meeting, then either Party may terminate this Contract by giving a thirty (30) days' notice to the other Party. Upon the expiry of such period, this Contract is automatically terminated without the need for further notice, unless the outstanding conditions have been satisfied by such date, in which case this Contract will not terminate.

2.2.3 Notwithstanding the preceding paragraph, if the conditions precedent referred to in Article 2.2.1 are not satisfied on account of reasons solely attributable to the Contractor, then BMC is entitled to call the earnest money deposit or the Performance Guarantee, as the case may be, delivered by the Contractor and terminate the Contract in accordance with Article 2.2.2.

### 2.3 Commencement of Services

If the conditions precedent indicated in Article 2.2.1 are satisfied or waived, as applicable, by the Parties, the Parties shall promptly convene and sign a notice fixing the commencement date (the "**Commencement Date**").

### 2.4 Extension of Term

BMC shall notify the Contractor six (6) months before the end of the Term if it wishes to enter into negotiations regarding an extension to this Contract. If both Parties agree, the Contract may be extended for a period mutually agreed after the end of the Term.

## 3. SERVICES

### 3.1 Scope of Services

Without prejudice to any other provision of this Contract, the Contractor shall carry out the Services set out in Schedule I within the Project Area and undertake the other obligations to be performed by the Contractor as further described in this Contract from the Commencement Date and until the end of the Term.

### 3.2 Undertakings

The Contractor undertakes the following:

- (a) The provision of the Services shall not contravene any Law and shall comply with all Laws;
- (b) The Contractor shall perform and complete the Services in a professional, timely, safe and environmentally responsible manner and comply with the safety, health and security regulations in force in India and the State of Odisha;
- (c) The Contractor shall use appropriate, advanced and proven technology, software and information systems;
- (d) The Contractor shall carry out its obligations under this Contract in a manner which is consistent with Indian standards, international best practices, methods, techniques, skills, diligence and prudence which are generally expected from an energy service company with

dmj x

05/10



similar obligations; and

- (e) The aggregate equity shareholding issued and paid up by the lead member of the Contractor shall not be less than:
- fifty-one per cent (51%) for a period of two (2) years as from the Commencement Date; and
  - twenty-six per cent (26%) for a period of three (3) years thereafter.

### 3.3 Extension of the Scope of Services

Two and a half (2.5) years after the Commencement Date, the Parties shall meet to discuss the possible extension of the scope of Services under this Contract to new lighting facilities. If the Parties do not agree on the terms and conditions for such extension, then BMC shall be entitled to enter into another contract with a third party for the new lighting facilities without any prejudice to this Contract and the Contractor's rights and obligations under this Contract.

## 4. BMC'S RESPONSIBILITIES

### 4.1 Access

- 4.1.1 BMC shall be responsible for providing the Contractor with, free of charge, on and from the Commencement Date, access to all information and data, the Existing Lighting Facilities, the premises for the in-house control room and all land in the Project Area, which access is required for the performance of the Services and in respect of which BMC has control. Access to the Existing Lighting Facilities and the land within the Project Area shall confer on the Contractor a right to only use the Existing Lighting Facilities and the land necessary to enable the Contractor to carry out the Services. If BMC removes any particular pole or fixture after the commissioning phase of the Project, the Contractor shall be entitled to the Energy Savings Fees that would have arisen out of the Energy Savings pertaining to such fixture for the remaining life of the Project, based on the average savings realised on a per fixture basis in the six (6) months prior to such removal; provided that the Contractor shall not be entitled to O&M Fees for such poles or fixtures. If access to any particular pole or fixture is not provided by BMC to the Contractor during Phase 4, the Contractor shall be entitled to the Energy Savings Fee for the fixtures that would have arisen out of the Energy Savings pertaining to such fixtures for the amount of time when access was not provided.

- 4.1.2 In the event BMC fails to provide the Contractor with, free of charge, access to all the Existing Lighting Facilities for any three (3) months during the Term, this shall constitute a BMC Event of Default in accordance with Article 27.2.1.

### 4.2 Assistance to the Contractor

- 4.2.1 If requested by the Contractor, BMC shall use its best endeavours to assist the Contractor in a timely and expeditious manner with the following:
- (a) Obtaining all Consents necessary for the Services (excluding any qualifications that the Contractor should already possess) such as construction permits, permits for temporary use of land and temporary suspension of water, power or traffic, etc.;
  - (b) Protecting underground pipelines, buildings and structures (including historic relics) and trees located on or close to the Project Area;

5/7x

05/10

- (c) Consulting with the Contractor if any construction or installation project implemented by BMC or other local public entity in the city of Bhubaneswar may have direct or indirect impact on the Contractor; and

- (d) Obtaining CESU's full cooperation during the Term of the Contract.

#### **4.3 Payment of Fees**

- 4.3.1 In consideration for the Services performed by the Contractor under this Contract, BMC shall pay to the Contractor the Energy Savings Fee and the O&M Fee in a timely manner in accordance with Article 16.

- 4.3.2 The Contractor shall issue invoices to BMC. In the event BMC fails to pay the complete amount set on the invoice issued by the Contractor within thirty (30) days of issuance of such invoice, BMC shall be required to pay the outstanding amounts plus interest for late payment for every day of delay to be calculated at one point twenty-five per cent (1.25%) per month.

#### **4.4 Lux Level Measurements**

- 4.4.1 Upon commencement of Phase 4, BMC shall conduct, with the assistance of the Independent Energy Auditor, lux level measurements on five per cent (5%) of the street lighting fixtures, randomly selected by BMC, on a semi-annual basis. The sample selection of points for the lux level measurements should be spread across at least 50% of the switching points comprising the total project area and adequately cover different types of roads. The Contractor shall be required to participate in the lux level measurements along with BMC and the Independent Energy Auditor. If the lux levels are found to be below the applicable standards specified in Schedule 2, the Contractor shall make payments to BMC for the amounts as determined under Article 16.3.

- 4.4.2 Such semi-annual measurements must be completed by 30<sup>th</sup> June and 31<sup>st</sup> December of each Financial Year for the Term of the Project.

#### **4.5 Operation and Maintenance**

BMC shall be responsible for the operation, maintenance and invoicing of all the identified switching points and street lighting fixtures until the same are handed over to the Contractor at the end of Phase I.

#### **4.6 Non-availability of power on any Switching Point(s)**

BMC shall be obligated to take up the matters of lack of quality and continuity of supply of power with CESU on any particular switching point(s) in case the same is not found to be acceptable by the Contractor.

### **5. THE CONTRACTOR'S RESPONSIBILITIES**

#### **5.1 Energy Baseline Determination**

- 5.1.1 With immediate effect from the Commencement Date, the Contractor shall undertake field surveys of the street lighting fixtures covered in the Project Area to accomplish the following (together, the "Energy Baseline"):

dmx  
5/10

dm  
05/10



- 11
- 
- (a) Understand the physical layout and single line diagram of various circuits and validate the type and quality of fixtures installed thereon;
  - (b) Assess the feasibility of metering and clubbing independent circuits for optimising the number of switching points where feeder panels, including meters, are to be installed;
  - (c) Avail buy-in from BMC on the proposed switching points metering plan. BMC shall respond in writing to the Contractor's plans to be submitted within one (1) week of such submission. If BMC fails to respond within one (1) week of such submission, the provisions of Articles 6.2 and 6.3 shall apply.

5.1.2 The Contractor shall undertake the preparation of an asset database and the marking of poles in accordance with the nomenclature suggested in Schedule 3.

5.1.3 Furthermore, upon BMC's approval of the metering plan for a particular switching point, the Contractor shall undertake the implementation of the proposed metering arrangement by installing the feeder panel comprising the metering equipment housed in a separately openable and sealable compartment. For switching points where the meters to be installed by the Contractor are to be considered as energy billing meter by CESU, the Contractor shall ensure that such meters adhere to the specifications notified by CESU and are tested in CESU's meter testing labs, and are installed and sealed in accordance with CESU's procedures. BMC shall assist the Contractor in coordinating with CESU to finalise the technical specifications for such meters, have such meters tested in CESU labs, and install and seal such meters on the respective switching points.

5.1.4 Upon installing the feeder panels and meters on the switching points, the Contractor shall coordinate the TPEA as elaborated in Schedule 3 along with the Independent Energy Auditor and BMC. BMC shall set off from the Energy Savings Fee, in accordance with Article 16.6, any necessary funds for onward release of payment to the Independent Energy Auditor within the maximum amount agreed upon between the Parties (as mentioned in Article 2.2.1(i)) and the payment terms of the contract to be entered into between BMC and the Independent Energy Auditor for the TPEA.

## **5.2 Services**

5.2.1 Once the survey report prepared following the field surveys has been accepted by BMC, the Contractor shall begin carrying out the Services in accordance with Schedule 1.

5.2.2 BMC gives the exclusivity to the Contractor to carry out the Services described in Schedule 1 in relation to all the Existing Lighting Facilities located within the Project Area throughout the Term and in accordance with this Contract.

5.2.3 Subject to the provisions of this Contract, the Contractor is solely responsible for the manner in which the Services are performed.

## **5.3 Environmental and Social Requirements**

5.3.1 The Contractor shall carry out the Services in accordance with all relevant Laws in India, as well as the 2012 IFC performance standards (or applicable environmental and social standards and guidelines to which the Equator Principles refer), and in particular:

- (a) PS 1 assessment and management of environmental and social risks and impacts;
- (b) PS 2 labour and working conditions;

57x

M  
05/10



- (c) PS 3 resource efficiency and pollution prevention; and
- (d) PS 4 community health safety and security.
- 5.3.2 The Contractor agrees to operate the Project with a documented environmental and social management system. The 2012 IFC performance standards can be accessed on the external webpage:

[http://www1.ifc.org/wps/wcm/connect/Topics\\_Ext\\_Content/IFC\\_External\\_Corporate\\_Site/IFC+Sustainability/Sustainability+Framework/Sustainability+Framework+-+2012/Performance+Standards+and+Guidance+Notes+2012/](http://www1.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/IFC+Sustainability/Sustainability+Framework/Sustainability+Framework+-+2012/Performance+Standards+and+Guidance+Notes+2012/)

- 5.3.3 The Contractor shall ensure that the practices employed to replace, collect, transport and dispose lamps are in accordance with applicable Laws.

## 6. TIMELINE FOR IMPLEMENTATION OF THE PROJECT

- 6.1 The Services to be performed by the Contractor for the Project can be classified into four (4) different phases as described in the table below. The Contractor shall adhere to the stipulated timelines as mentioned hereunder:

Phase	Activity	Timeline
Phase 1	<p><b>Field Survey, Metering, Establishment of Energy Baseline and Handover</b></p> <p>The activities in this phase must be conducted on a per switching point basis and include:</p> <ul style="list-style-type: none"> <li>Field survey and identification of switching points wise the street lighting stretches/ feeders to be covered under the Project. Identification of actual street lighting fixtures that are to be covered under the Project from those covered under the Project Area to be done at this stage based on a feasibility assessment;</li> <li>Completion of pole marking/ asset marking in accordance with nomenclature requirements identified in Schedule 3;</li> <li>Completion work related to metering/ feeder panel installation on identified switching points. Such meters must adhere to the specifications notified by CESU, are tested in CESU's meter testing labs, installed and sealed in accordance with CESU's procedures;</li> <li>Third Party Energy Audit for establishing the energy baseline consumption norm and verifying asset details;</li> <li>Handover of all identified street lighting fixtures and switching points by BMC to the Contractor; and</li> <li>Identification of ECMs to be implemented by the Contractor;</li> <li>Establishment of an in-house control room.</li> </ul>	Within eight (8) months from the Commencement Date.
Phase 2	<p><b>Implementation Phase</b></p> <p>The activities in this phase cover the implementation of ECMs identified in Phase 1 on the respective metered/ handed over</p>	In parallel with Phase 1 as and when the TPEA is completed for the

Amgix

05/10

Phase	Activity	Timeline
	points/ stretches.	respective feeders/stretchches.
Phase 3	<b>Commissioning Phase</b>  The activities in this phase cover the Project commissioning, including the taking over of respective switching points with joint meter reading to be done along with BMC.	In parallel with Phase 2.  Phase 3 shall be considered completed when seventy per cent (70%) of the street lighting fixtures within the Project Area are covered by the Contractor or ten (10) months from the Commencement Date, whichever is earlier.
Phase 4	<b>Operation &amp; Maintenance Phase</b> <ul style="list-style-type: none"> <li>O&amp;M of switching points and street lighting fixtures covered under the Project, including (but not limited to) the replacement of non-functional fixtures at the Contractor's own cost.</li> <li>The Contractor shall, on a daily basis, record and report to BMC the energy consumption, power outage, voltage dimming hours, hour wise number of estimated functional lamps, etc. as per Schedule 3.</li> <li>The Contractor shall issue monthly invoices in the same monthly billing period (i.e. the same initial and final meter reading dates) as followed by CESU and within seven (7) days of BMC's receipt of CESU's bills for each switching point, providing detailed calculations of the actual energy savings achieved with respect to the energy baseline consumption norm determined by the TPEA. Such invoices should clearly highlight the actual energy consumption, total outage hours, and adjustments of non-functional fixtures for their respective durations as per the format provided in Schedule 3.</li> <li>The Contractor shall provide training for BMC staff and other personnel concerned in the routine operation and maintenance of systems, including developing the training modules and toolkits.</li> <li>The Contractor shall cooperate with the Independent Energy Auditor to allow monitoring, measurement, verification and reporting of performance and savings.</li> </ul>	From the completion of Phase 3 until the Term of the Project.

Am5/x

Am  
05/10

Phase	Activity	Timeline
	<ul style="list-style-type: none"> <li>The Contractor shall participate with BMC and the Independent Energy Auditor in measurement of lux levels on five per cent (5%) of street lighting fixtures, randomly selected by BMC, on a semi-annual basis.</li> <li>The Contractor shall schedule interruptions of street lighting service in a manner that minimises such interruptions. Scheduled interruptions of street lighting service shall not exceed twelve (12) hours at a given time.</li> </ul>	

**6.2** Notwithstanding the above Timeline, if the Contractor does not have access to part or the whole of the Existing Lighting Facilities for any reason, including, but not limited, to a Force Majeure Event (as defined in Article 20.1) for any period of time during the Term of the Contract, then the Contractor shall be excused from the performance or punctual performance of its obligations under this Contract for such period of time when he doesn't have access to all the Existing Lighting Facilities in the Project Area. In particular, the Contractor shall be excused from not having taken over seventy per cent (70%) of the street lighting fixtures within the Project Area, as required under Phase 3.

**6.3** In addition, the deadline of the relevant Phase (1, 2 or 3) (as mentioned in the above Timeline) shall be extended for a period of time equal to the period of time during which the Contractor didn't have access to all the Existing Lighting Facilities.

## **7. ASSET OWNERSHIP**

### **7.1 Existing Lighting Facilities**

**7.1.1** BMC (and/or other relevant government authorities, as applicable) shall at all times during the Term remain the owner of the land and the Existing Lighting Facilities, with the exception of certain poles which are owned by CESU.

**7.1.2** The Contractor shall hand over BMC street lighting fixtures/ fittings and any other equipment that have been replaced for implementing the ECMs, to BMC at its stores within forty-eight (48) hours of such replacement. BMC shall make necessary arrangements for creation of space in its stores and onward usage or disposal of the replaced equipment as per applicable Laws.

**7.1.3** The Contractor will not be liable for any liability in relation to the Existing Lighting Facilities existing prior to the Commencement Date or arising from any event or circumstance that occurred prior to the Commencement Date.

### **7.2 Newly Installed Equipment and Systems**

**7.2.1** The Contractor shall remain the owner of the equipment and systems installed by the Contractor during the Term. The Contractor shall undertake all the procurement of equipment and services necessary for the Project. The Contractor shall hand over any replaced equipment, fittings or other items to BMC with proper documentation for BMC's

*Amg*

*Dr*  
*05/10*



verification. The replaced equipment shall be free of any lien. At the end of the Term, the Contractor shall submit to BMC a list of all the equipment, fittings or other items that were replaced during the Term.

- 7.2.2 At the expiry of the Term, all rights and titles to, and interests in, all improvements and equipment constructed or systems installed are vested in BMC, subject to any payments made by BMC to the Contractor in accordance with Article 27.5.4 if applicable, free and clear of all and any liens and encumbrances created or caused by the Contractor. The Contractor shall surrender possession of the said equipment and systems to BMC in good repair and condition, reasonable wear and tear accepted.

## 8. DELAY LIQUIDATED DAMAGES

- 8.1 Where the Contractor fails to complete the Services within the Timeline provided under Article 6, BMC shall be entitled to receive Delay Liquidated Damages as follows:

- (a) In the event the Contractor fails to finalise the activities of Phase 1 within the Timeline stipulated in Article 5.3.3, the Contractor shall be liable to pay BMC Delay Liquidated Damages of an amount equal to one lakh Indian Rupees (Rs. 1 lakh) for each week of delay, subject to a maximum delay of eight (8) weeks. In the event the activities in Phase 1 are not finalized by the Contractor within the maximum delay of eight (8) weeks after the Timeline stipulated in Article 6, this breach shall constitute a Contractor Event of Default and BMC shall be entitled to terminate this Contract in accordance with Article 27.4.1.
- (b) In the event the Contractor fails to finalise the activities in Phase 3 within the Timeline stipulated in Article 6, the Contractor shall be liable to pay on a weekly basis to BMC Delay Liquidated Damages of an amount equal to the savings that would have been achieved if the remaining street lighting fixtures had been commissioned. The Quoted Guaranteed Energy Savings shall be used to estimate the amount of savings. If the activities in Phase 3 are not finalised by the Contractor within the maximum delay of eight (8) weeks after the Timeline stipulated in Article 6, this breach shall constitute a Contractor Event of Default and BMC shall be entitled to terminate this Contract in accordance with Article 27.4.1.

## 9. INDEPENDENT ENERGY AUDITOR

- 9.1 BMC shall appoint an independent energy auditor (the "Independent Energy Auditor") selected following a transparent and competitive tender procedure launched by BMC. All the Independent Energy Auditor's expenses shall be borne by the Contractor and shall be set off by BMC against the Energy Savings Fee to be paid by BMC to the Contractor in accordance with Articles 5.1.4 and 16.6.

- 9.2 The scope of work of the Independent Energy Auditor is described in detail in Schedule 4.

## 10. REPRESENTATIONS AND WARRANTIES

### 10.1 The Contractor's Representations and Warranties

The Contractor represents and warrants to BMC that:

- (a) The Contractor is an independent company duly incorporated, validly existing and of good standing under Indian Laws;
- (b) The Contractor is financially solvent, is able to pay its debts as they mature, and has sufficient capital and resources to complete its obligations under this Contract;

dmj  
5/10

05/10

- (c) The Contractor is not a party to any legal, administrative, arbitral, investigation or other proceedings or controversy, pending or (to the best of the Contractor's knowledge) threatened, that would adversely affect its ability to perform its rights and obligations under this Contract;
- (d) Without BMC's written permission, the Contractor shall not engage in any related activities in the Project Area that may impinge upon this Project, other than the Services;
- (e) The execution and performance of this Contract will not result in a breach or violation of, or constitute a default under, any agreement to which the Contractor is a party; and
- (f) The execution and performance of this Contract has been duly authorised, and this Contract has been duly executed by the signatories and constitutes a legal valid and binding obligation.

## 10.2 BMC's Representations and Warranties

BMC represents and warrants to the Contractor that:

- (a) BMC has the power and authority to enter into and perform its obligations under this Contract; and
- (b) The execution of this Contract will not result in a breach or violation of or constitute a default under any agreement to which it is a party.

## 11. REPRESENTATIVES

### 11.1 BMC Representative

- 11.1.1 BMC may from time to time replace its Representative by notifying the Contractor (to be effective upon receipt by the Contractor).
- 11.1.2 The BMC Representative shall have full authority and power to represent and act for BMC at all times during the Term. All notices, instructions, orders, certificates, approvals and all other communications under this Contract shall be given by, and to, the BMC Representative unless BMC notifies the Contractor otherwise.

### 11.2 The Contractor Representative

- 11.2.1 The Contractor Representative shall have full authority and power to represent and act on behalf of the Contractor at all times during the Term, including for sending or receiving notices, instructions, information and all other communication in relation to this Contract.
- 11.2.2 The Contractor shall not revoke the appointment of the Contractor Representative without notifying BMC of the new Contractor Representative.

## 12. REPORTING

- 12.1 During the Term, the Contractor shall provide monthly reports to BMC about the following matters:

- (a) Update on the assets;

*dmjx*

*dmjx*  
05/10

- (b) Operation and maintenance services;
- (c) Energy saving report;
- (d) Lamp failure report; and
- (e) Monitoring and verification report.

**12.2** If the Contractor does not issue monthly reports within ten (10) days of the end of the relevant month for any three (3) months or there is major false information in more than three (3) reports during the Term of the Contract, this breach shall constitute a Contractor Event of Default.

**12.3** In addition to the reports mentioned in Article 12.1, the Contractor shall provide daily reports during the entire Phase 4. If the Contractor does not issue daily reports in Phase 4 for three (3) consecutive days or for more than ten (10) days in a Financial Year, this breach shall constitute a Contractor Event of Default.

### **13. EMPLOYEES AND TRAINING**

**13.1** BMC shall remain the principal employer of the municipal employees working for BMC's street lighting department. Such employees may or may not, at the Contractor's sole discretion, be seconded to the Contractor for a specific duration and under terms and conditions to be agreed upon between the Parties. The Contractor has no obligation under this Contract to employ directly or indirectly any municipal employees.

**13.2** Notwithstanding the preceding paragraph, the Contractor shall train the employees of BMC's street lighting department to operate, maintain and repair the equipment and systems installed by the Contractor. Training shall include both classroom and a practical instruction. Course materials shall include the Contractor's supplied operation and maintenance plans and manufacture manuals.

**13.3** The Contractor's personnel, representatives or Subcontractors shall be under the complete control of the Contractor and shall not be deemed to be employees of BMC.

### **14. THIRD PARTY CLAIMS**

#### **14.1 Indemnification**

The Contractor shall indemnify and hold harmless BMC and its employees or any other contractor from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs and expenses of whatsoever nature, including attorney's fees and expenses, that arise in connection with the execution of the Services due to the negligence or wilful misconduct of the Contractor, any Subcontractor or their employees, in respect of the following, except to the extent that the following is caused by the negligence of BMC:

- (a) the death or injury of any person;

*dm51x*

*05/10*



- (b) loss or damage to any property, real or personal; and
- (c) third party losses and claims.

#### 14.2 Handling of Claims

If any proceedings are brought or any claim is made against BMC in relation to the performance of the Services by the Contractor, any Subcontractor or their employees, BMC shall promptly notify the Contractor and set out full particulars of the claim. The Contractor shall conduct such proceedings or claims and any negotiations for the settlement of any such proceedings or claims at its own expense and on behalf of BMC and with BMC's assistance.

#### 15. LIMITATION OF LIABILITY

15.1 The aggregate liability of the Contractor to BMC under this Contract in any Contract Year shall not exceed fifty per cent (50%) of the sum of the Energy Savings Fee based on Quoted Guaranteed Energy Savings and the O&M Fee for such Contract Year. The limitation of liability shall not apply to nor be reduced by:

- (a) payments made by the Contractor pursuant to its insurance policies;
- (b) the Contractor's liability in case of fraud, fraudulent misrepresentation, wilful misconduct or wilful default, gross negligence or corrupt practices; or
- (c) the Contractor's liability in respect of any failure to pay any Subcontractor.

15.2 Neither BMC nor the Contractor shall be liable to the other under this Contract for any loss of profit, loss of revenue or any other indirect or consequential damages that may be suffered by the other Party.

15.3 Unless this Contract provides otherwise, no approval, expression of satisfaction, comment, review, payment or certificate whatsoever made or given (or any failure to make or give the same) by BMC, its representatives or employees under this Contract, shall relieve the Contractor of any of its obligations, risks or liabilities under this Contract.

#### 16. REMUNERATION

##### 16.1 Energy Savings Fee

16.1.1 As consideration for the Energy Savings achieved, BMC shall pay the Contractor a fee for the energy savings (the "Energy Savings Fee"), which is computed as follows:

Energy Savings Fee for a given month = 90% x energy saved in the given month (kWh) x tariff (Rs./ kWh) as specified in the table below

Financial Year (1 April – 31 March)	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024
Applicable Tariff for computing Energy Savings Fee (Rs./ kWh)	5.56	5.70	5.84	5.99	6.14	6.29	6.45	6.61	6.77	6.94	7.12	7.30

Amg  
5/10

Amg  
05/10

16.1.2 BMC shall retain ten per cent (10%) of the Energy Savings realised each month during the Term of the Project. The payment of the Energy Savings Fee by BMC to the Contractor shall be governed by the following provisions:

- (a) The Energy Savings Fee shall be provided by BMC to the Contractor as and when the handed over street lighting fixtures covered under a particular switching point are commissioned in Phase 3. All the switching points will be considered together on a cumulative basis, provided that during Phase 3, the Contractor is eligible for payments from BMC only if savings achieved for all the handed over switching points considered together on a cumulative basis are equivalent to or greater than eighty per cent and two hundreds of a per cent (80.02%) of the Energy Baseline.
- (b) If the realised monthly savings are less than eighty per cent and two hundreds of a per cent (80.02%) of the Energy Baseline, the Contractor shall make payments to BMC corresponding to fifty per cent (50%) of the difference between the amount of energy calculated at Energy Savings at eighty per cent and two hundreds of a per cent (80.02%) of the Energy Baseline and the realised percentage of Energy Savings. The payment amount shall be determined based on the energy supply tariff applied for the given month by CESU.

16.1.3 To determine BMC's payments as specified in Article 16.1.1, the Contractor shall issue to BMC monthly invoices for each switching point using the same starting and closing meter reading dates each month. The invoices must be accompanied by the tables attached in Schedule 3 for each switching point, including calculations of the actual Energy Savings achieved based on the Energy Baseline for each point determined as per the provisions of Article 5.1. The invoices should clearly highlight the actual energy consumption, total outage hours, and adjustments of non-functional fixtures for their respective durations for each switching point. The Contractor shall ensure that the invoice issued is for the same billing period as that followed by CESU.

## 16.2 O&M Fee

16.2.1 As consideration for the Operation and Maintenance services provided by the Contractor, BMC shall pay the Contractor an operation and maintenance fee (the "O&M Fee") on a monthly basis, to be invoiced in conjunction with the invoice for the Energy Savings Fee, for the handed over points starting from Phase 4.

16.2.2 The O&M Fee per year per handed over street lighting fixture shall be as per the table below:

Financial Year (1 April – 31 March)	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024
Applicable Annual O&M Fee (Rs./lighting fixture)	300	317	334	352	372	392	414	436	460	486	512

## 16.3 Penalty for Non-Compliance with Lux Standards

*Amg*

*05/10*



- 16.3.1 If the Contractor fails to achieve the required lux levels based on the standards specified for the identified street lighting fixtures, as determined under Article 4.4, the Contractor shall make payments to BMC of an amount equal to the amount determined in accordance with the following formula for each Financial Year of the Term. Such amounts may be directly set off by BMC against the Energy Savings Fee in accordance with Article 16.6.

Lux non-compliance penalty =

$$\frac{[(\text{number of non-compliant street lighting fixtures identified}) \times (\text{annual Value of Guaranteed Energy Savings} + \text{Annual O\&M Fee})]}{\text{number of street lighting fixtures surveyed}}]$$

- 16.3.2 In the above formula, the Value of Guaranteed Energy Savings (in Indian Rupees) and the Annual O&M Fees (in Indian Rupees) shall be considered for the entire Project.

- 16.3.3 The Contractor shall stagger its payment to BMC into six (6) equal monthly instalments during six (6) months following the end of the respective Financial Year for which the semi-annual field measurements have been taken by the Independent Energy Auditor.

#### 16.4 Penalty for Non-Compliance to Minimum Up-Time

- 16.4.1 The Contractor shall be responsible for maintaining the handed over street lighting fixtures under each switching point in good working condition and shall ensure that the non-working lamp hours on each switching point are maintained within acceptable limits at all times during the Term.

- 16.4.2 All street lighting faults arising out of failures or malfunctioning of equipment installed by the Contractor shall be cured within a period of forty-eight (48) hours after the failure or malfunctioning is reported to BMC. Failure of the same shall result in a penalty of twenty-five Indian Rupees (Rs. 25 only) per street lighting fixture per day. If the Contractor does not rectify the same within seven (7) days, BMC may proceed with such rectification and deduct the cost of such work from the Contractor's payment.

- 16.4.3 The Contractor shall be liable to pay penalties for any loss of functional lamp hours on each switching point if such non-functional lamp hours exceed two per cent (2%), with the percentage determined at the end of each Financial Year in accordance with the following formula:

% non-functional lamp hours for a switching point =

$$\left( \frac{\text{non - functional lamp hours}}{\text{total onhours} \times \text{No. of fixtures}} \right)$$

- 16.4.4 For every slippage of one per cent (1%) in non-functional lamp hours beyond the acceptable limit of two per cent (2%), the Contractor shall pay BMC an amount equivalent to three per cent (3%) of the Value of Guaranteed Energy Savings and O&M Fees for such switching point, in accordance with the following:

penalty for non-compliance of minimum up-time =

$$3 \times (\% \text{ slippage}) \times (\text{annual Value of Guaranteed Energy Savings} + \text{Annual O\&M Fees})$$

In the above formula, the annual Value of Guaranteed Energy Savings and the Annual O&M

Amgix

Ph  
25/10



Fees are for each respective switching point.

#### **16.5 Clean Development Mechanism**

The Contractor is eligible to claim clean development mechanism benefits arising out of the Project. BMC shall provide all reasonable assistance to the Contractor in registering the Project as a clean development mechanism activity. Ninety per cent (90%) of any clean development mechanism benefits arising out of the Project shall be in favour of the Contractor while the last ten per cent (10%) shall be received by BMC.

#### **16.6 Set Off**

BMC shall be entitled to set off any undisputed amounts payable or liabilities under or in relation to this Contract against the Energy Savings Fee to be paid by BMC to the Contractor in accordance with Article 16.1. If the amounts to be set off are larger than the relevant Energy Savings Fee to be paid by BMC to the Contractor, then the balance shall be recovered from future Energy Savings Fees to be paid by BMC.

### **17. PAYMENT SECURITY**

#### **17.1 Trust and Retention Account**

Within three (3) months of execution of Trust and Retention Account Agreement, BMC shall deposit an amount equal to what it used to pay for three (3) months of electricity bills before the commencement of the Project plus O&M Fee of seventy-five Indian Rupees (Rs. 75 only) for each street lighting fixture in the Project Area. Each month thereafter and until the end of the Term, BMC shall deposit an amount equal to what it used to pay for one (1) month of electricity bills before the commencement of the Project plus one (1) month of O&M Fee as per the year-wise amount mentioned in the table in Article 16.2.2 for each street lighting fixture in the Project Area. The money shall be deposited in an escrow account, called the trust and retention account, in a reputable bank acceptable to the Contractor for the benefit of the Contractor. The bank shall undertake to use the money deposited in the escrow account to pay seventy-five per cent (75%) of the Energy Savings Fee and the O&M Fee to the Contractor upon submission by the Contractor of an invoice. The last twenty-five per cent (25%) shall be paid by the bank upon submission by the Contractor of a written approval of the invoice by BMC.

#### **17.2 Letter of Comfort**

The Housing and Urban Development Department of the Government of Odisha shall deliver to the Contractor a letter of comfort duly executed in the form set out in Schedule 8. This letter of comfort shall secure the proper and timely performance by BMC of its payment obligations under this Contract.

### **18. PERFORMANCE GUARANTEE**

#### **18.1 Performance Guarantee**

dm  
5/12

05/10

18.1.1 The Contractor shall deliver to BMC a duly executed bank guarantee in the form set out in Schedule 5 issued by a reputable bank or financial institution acceptable to BMC, of an amount equal to sixty (60) lakhs Indian rupees ("**Performance Guarantee**") within thirty (30) days of the Effective Date. The Performance Guarantee shall be returned to the Contractor immediately after the expiry of the Term.

18.1.2 The Performance Guarantee shall secure the proper and timely performance of the Contractor's obligations as from the Commencement Date until the end of the Term, including the payment of Delay Liquidated Damages pursuant to Article 8.

## 18.2 Notice

BMC shall, prior to making any demand under the Performance Guarantee, send a written notice to the Contractor mentioning the existence of a Contractor Event of Default and providing a cure period of fifteen (15) days. If the Contractor does not remedy its Contractor Event of Default within these fifteen (15) days, then BMC shall be entitled to call part or full, as relevant, of the Performance Guarantee.

## 18.3 Replacement

Where the Performance Guarantee is subject, pursuant to its terms, to a fixed expiry date, the Contractor shall, not less than fifteen (15) days prior to such expiry date, amend or replace the Performance Guarantee, as the case may be, with a duly executed amended or replacement guarantee. Any replacement Performance Guarantee must be issued for at least one (1) year by a reputable bank or financial institution of equivalent standing to the original issuer as approved by BMC, and be on identical terms. If the Contractor fails to provide an amended or replacement Performance Guarantee as required, BMC may issue a demand under the Performance Guarantee for the full amount available and shall be entitled to hold such amount as security for the performance of the Contractor's obligations under this Contract until a replacement Performance Guarantee is provided (whereupon such amounts shall be returned to the Contractor without any obligation to account for interest).

## 18.4 Fees, Taxes, Costs and Expenses

All fees, taxes, costs and expenses associated with procuring, preparing, completing and stamping (if applicable) the Performance Guarantee shall be the responsibility of and paid by the Contractor.

## 19. THEFT OF ENERGY

If either BMC or the Contractor is aware of theft of energy, it shall inform the other Party without delay. The magnitude and nature of the energy theft shall be assessed by both Parties. BMC shall be responsible for taking all the corrective measures required, provided that the Contractor reported such theft to BMC. BMC shall report back the status of mitigation of such theft to the Contractor within two (2) days of the Contractor's report. In cases where BMC is not able to take suitable actions to mitigate such theft, it shall make due adjustments for arriving at the Energy Savings for the respective switching point(s) and for the payment of the Energy Savings Fee to the Contractor so as to not penalise the Contractor for such theft.

## 20. FORCE MAJEURE

20.1 A "**Force Majeure Event**" shall mean any event or combination of events occurring inside or directly involving the city of Bhubaneswar that is beyond the reasonable control of BMC or the Contractor, as the case may be, occurring or subsisting after the Effective Date and





which (or the effects of which) is unavoidable, notwithstanding the reasonable care of the Party affected, including, in the case of the Contractor, any Subcontractor, and, in the case of the Contractor only, such event(s) could not have been foreseen by an experienced contractor, or to the extent that the event(s) could have been foreseen by an experienced contractor, such contractor could not have reasonably mitigated against the effects of such events. Such Force Majeure Events include, but are not limited to:

- (a) War (whether declared or undeclared), invasion, armed conflict or act of foreign enemy;
- (b) Rebellion, sabotage, act of terrorism, revolution, insurrection, civil war or epidemic (excluding vandalism);
- (c) Strikes, lock-outs, works to rule or go-slows that are widespread or nationwide, or that are of a political nature, unless they are solely related to BMC, the Contractor or any Subcontractor; and
- (d) Lightning, earthquake, flood, hurricane, typhoon, tornado or volcanic activity.

Such events cannot be caused or contributed to by an act or omission of the Party relying on it or persons for whom that Party is responsible.

**20.2** If either Party is prevented, hindered or delayed from performing any of its obligations under this Contract by a Force Majeure Event, then it shall notify the other Party in writing of the occurrence of such event and the circumstances thereof within fourteen (14) days after the occurrence of such event, and send a copy of such notice to the Independent Energy Auditor.

**20.3** The Party who has given such notice shall be excused from the performance or punctual performance of its obligations under this Contract for so long as the relevant Force Majeure Event continues and to the extent that such Party's performance is prevented, hindered or delayed.

**20.4** The Party or Parties affected by the Force Majeure Event shall use reasonable efforts to mitigate the effects thereof upon its/their performance of this Contract and to fulfil its/their obligations under this Contract, but without prejudice to either Party's right to terminate this Contract.

**20.5** No delay or non-performance by either Party caused by the occurrence of any Force Majeure Event shall:

- (a) constitute a breach under this Contract;
- (b) extend the Term; or
- (c) give rise to any claim for damages or additional cost or expenses occasioned thereby.

**20.6** If the performance of the Services is substantially prevented, hindered or delayed for more than one hundred and twenty (120) consecutive days on account of one or more Force Majeure Events during the Term, either Party may terminate this Contract by giving a notice to the other. If this Contract is terminated pursuant to this Article, BMC shall pay to the Contractor the part of the Energy Savings Fee payable for the Energy Savings performed prior to the Termination Date and the part of the O&M Fee payable for the operation and maintenance services performed prior to the Termination Date. The Contractor shall not be entitled to any further compensation.

Amx

05/10



20.7 Notwithstanding this Article, Force Majeure Events shall not apply to any BMC's obligation to make payments to the Contractor hereunder.

## 21. MATERIAL ADVERSE GOVERNMENT ACTION

21.1 A "Material Adverse Government Action" ("MAGA") shall mean any act or omission, after the Effective Date, by BMC or any other public entity, which has a Material Adverse Effect.

21.2 A MAGA shall include the following circumstances:

- (a) Any imposition or change of Law that is directly targeted at the Project and/or projects similar to the Project and/or that is discriminatory against the Contractor;
- (b) Any imposition or change of Law of an environmental or technical nature which would have the effect of making the Laws more stringent than the Laws in force at the Effective Date;
- (c) Expropriation or compulsory acquisition, or seizure of the Existing Lighting Facilities by a public entity with respect to substantially the same subject matter;
- (d) Any material breach by CESU of its obligations, including, but not limited to, failure to supply electricity within the whole or part of the Project; and
- (e) Any regulator's decision having the effect of decreasing the Contractor's remuneration under this Contract.

21.3 Within thirty (30) days of notice to BMC of a Material Adverse Government Action, BMC shall procure the remedy of the MAGA in question. Should BMC fail to procure a remedy prior to the expiry of the thirty (30) day period, the Parties shall discuss the issue in an attempt to reach a mutually satisfactory solution that restores the Contractor to the position it would have been in had such MAGA not occurred (including compensation for costs and loss of profits). If the Parties fail to reach an agreement on a satisfactory solution, the Contractor shall have the right to terminate this Contract.

21.4 The Contractor shall not be excused from performing its obligations under this Contract upon the occurrence of a MAGA, unless the Material Adverse Effect causes the Contractor to fail to perform its obligations.

## 22. TAXES AND DUTIES

22.1 The Contractor is solely responsible and liable for the payment of all taxes in relation the Services excluding incidence of service tax on invoices/ bills claimed by it under the terms of this Contract which shall be reimbursed by the BMC.. The Contractor shall defend, indemnify and hold harmless BMC from and against any liability for payment of such taxes, other than service tax.

22.2 The provisions of this Article shall survive the termination or expiry of this Contract.

## 23. CONFIDENTIALITY

23.1 The Parties shall treat as confidential the existence and contents of this Contract (including its Schedules), all the information and documents obtained in relation to this Contract, the Services, as well as all other aspects of the Project contemplated under this Contract. The duration of the confidentiality obligation shall last for two (2) years following the end of the Term.

dmx

05/10

---

**23.2** Article 23.1 shall not apply in the following cases:

- (a) Information already published or otherwise publicly available;
- (b) Information already obtained by one Party in a manner which does not breach a confidentiality obligation;
- (c) Information obtained from a third party in a manner which does not breach a confidentiality obligation;
- (d) Information required to be disclosed in accordance with Indian Laws; and
- (e) Information disclosed for the purpose of the performance by either Party of its obligations under this Contract.

**24. NOTICE**

**24.1 Notice**

Any notice under this Contract shall be in writing and in English, and shall be delivered in person or sent by registered post, fax or email to the following addresses:

**24.1.1 For BMC:**

Bhubaneswar Municipal Corporation  
Vivekanda Marg  
Bhubaneswar  
751014, Odisha  
Fax: +91-674-2432895  
Email: commissioner@bmc.gov.in

To the attention of: Municipal Commissioner

**24.1.2 For ESCO:**

Super Wealth Financial Enterprises Private Limited  
c/o Dalal Desai & Kumana  
Union Co-operative Insurance Building,  
2nd Floor, 23, Sir P.M. Road, Fort,  
Mumbai-400 001  
Fax: +91-22 2287 2249  
Email: shs.ael@gmail.com / mkshetrapal@gmail.com

To the attention of: Mr. Suresh Shah/ Mr. Manik Kshetrapal

**24.2 Change of Information**

Should either Party need to change its contact information, it shall inform the other Party in writing fifteen (15) days in advance. The change takes effect immediately upon receipt of such notice by the other Party.

**25. INSURANCE**

The Contractor shall at all times, as may be applicable, obtain, maintain and renew those insurance covers required in relation to people, equipment, systems as well as third party

dyg  
5/10

Dr  
05/10

damages in accordance with good industry practice. In particular, the Contractor shall maintain an insurance coverage against the risk of damage by fire or otherwise (including vandalism) of Contractor-owned and installed equipment and systems until the title to the equipment and systems passes on to BMC upon expiry of the Term. In relation to damage caused by acts of vandalism, should the premium payable by the Contractor pursuant to this Article 25 increase due to a large number of such acts, BMC shall bear the costs of such increase in insurance premium by refunding the Contractor such amount

## 26. STEP-IN RIGHTS

- 26.1 If the Lenders believe that they need to take action in connection with the Services because the Contractor is in breach of its obligations as further detailed in the direct agreement to be entered into between the Lenders, the Contractor and BMC as attached in Schedule 7, then the Lenders shall be entitled to take action in accordance with Article 26.2 below.
- 26.2 If the Lenders wish to take action under Article 26.1, they shall notify in writing BMC and the Contractor of the following:
- (a) The action they wish to take;
  - (b) The reason for such action;
  - (c) The date they wish to commence such action;
  - (d) The time period which they believe will be necessary for such action; and
  - (e) To the extent practicable, the effect on the Contractor and its obligation to provide the Services during the period such action is being taken.
- 26.3 Following service of such notice, the Lenders shall take such action themselves or through a third party (the "**Required Action**") if the Contractor does not remedy or rectify its breach within the time period specified in the notice (to be determined reasonably having regard to the seriousness of the risk or damage).
- 26.4 The Contractor shall bear all the costs linked to the Required Action taken by the Lenders. The Required Action shall be taken without prejudice to any other rights or remedies available to the Lenders or BMC under this Contract or the Laws.
- 26.5 In addition to the step-in rights described hereabove, the Contractor may grant a pledge in favour of the Lenders over all of the equipment, material and systems installed and owned by the Contractor in order to guarantee and secure the performance by the Contractor of all its obligations under this Contract. The pledge is granted as a security only and shall not modify any of the Contractor's obligations with respect to its equipment, material and systems.

## 27. TERMINATION

### 27.1 Termination Events

This Contract shall terminate:

- (a) due to a Force Majeure Event in accordance with Article 20;
- (b) due to a BMC Event of Default in accordance with Article 27.2;

dy  
5/8

dy  
05/10



- (c) due to a Contractor Event of Default in accordance with Article 27.3; or
- (d) due to the non-occurrence of the Commencement Date in accordance with Article 2.

## 27.2 BMC Event of Default

27.2.1 The following events, provided that they are not caused by a Contractor Event of Default or a Force Majeure Event and are not cured within sixty (60) days following the issuance of a notice from the other Party, shall constitute a "**BMC Event of Default**" and the Contractor shall be entitled to terminate this Contract:

- (a) BMC made any representation or warranty that was incorrect when made, causing a Material Adverse Effect on the Contractor's ability to perform its obligations in accordance with this Contract;
- (b) BMC is in material breach of its obligations under this Contract, including but not limited to payment default (in accordance with Article 27.2.2) or access default (in accordance with Article 4.1.2); and
- (c) A Material Adverse Government Action occurs and is not cured or remedied in accordance with Article 21.3.

27.2.2 There is a payment default if BMC fails to pay the Contractor any undisputed amount due and payable under this Contract within sixty (60) days of the date of issuance of the invoice by the Contractor.

## 27.3 Contractor Event of Default

27.3.1 The following events, provided that they are not caused by a BMC Event of Default or a Force Majeure Event and are not cured within sixty (60) days following the issuance of a notice from the other Party, shall constitute a "**Contractor Event of Default**" and BMC shall be entitled to terminate this Contract:

- (a) The Contractor made any representation or warranty that was incorrect when made;
- (b) Liquidation or insolvency of the Contractor;
- (c) Transferring the Services in violation of this Contract;
- (d) The Contractor has been convicted of a Corrupt Act;
- (e) The Contractor is in material breach of any of its obligations under this Contract;
- (f) BMC determines that the Contractor has, directly or indirectly, or through an agent, engaged in corrupt practices, fraudulent practices, coercive practices, undesirable practices or restrictive practices during the bidding process for this Project;
- (g) The Contractor's failure to pay the Delay Liquidated Damages within the time periods specified hereunder, or the failure by the Contractor to finalise the activities in Phases 1 and 3 within the maximum delay of eight (8) weeks after the Timeline, as specified in Article 8; and
- (h) The Contractor's failure to issue monthly reports in accordance with Article 12.

27.3.2 Notwithstanding the provisions of Article 27.3.1, failure by the Contractor to issue monthly reports in accordance with Article 12 shall automatically constitute a Contractor Event of

Amg x

05/10

Default without having to wait for the end of the sixty (60) days cure period.

#### **27.4 Termination Procedure**

##### **27.4.1 Termination of this Contract by BMC**

BMC may terminate this Contract by giving a termination notice to the Contractor if, subject to Article 18 and without prejudice to the Lenders' rights, a Contractor Event of Default has occurred and continued for more than sixty (60) days after BMC notified the Contractor of such Contractor Event of Default.

##### **27.4.2 Termination of this Contract by the Contractor**

The Contractor may terminate this Contract by giving a termination notice to BMC if a BMC Event of Default has occurred and continued for more than sixty (60) days after BMC has received a notice from the Contractor mentioning the BMC Event of Default and requesting BMC to remedy such BMC Event of Default.

#### **27.5 Termination Payments**

27.5.1 In case of termination of the Contract in accordance with Article 2.2.3, BMC shall be entitled to call the earnest money deposit or the Performance Guarantee, as the case may be, delivered by the Contractor. In case of termination of the Contract in accordance with Article 2.2.2, neither Party shall be liable for any payments to the other Party and BMC shall return the earnest money deposit or the Performance Guarantee, as the case may be, promptly to the Contractor.

27.5.2 In case of termination of the Contract at any time during Phase 3 or Phase 4 due to a Force Majeure Event as specified in Article 20, BMC shall pay the Contractor one hundred percent (100%) of the Book Value for all the equipment constructed or systems installed up to the Termination Date, as duly certified by a reputable auditor and approved by BMC. In case of termination arising on account of a Force Majeure Event during Phase 1 or Phase 2, neither Party shall be liable for any payments to the other Party.

27.5.3 In case the Contractor does not finalise the activities of Phase 1 or Phase 3 as per the Timeline stipulated in Article 6, and subject to the provisions of Article 8, BMC shall have the right to terminate the Contract. In such case, BMC would call the whole amount of the Performance Guarantee submitted by the Contractor. BMC shall pay the Contractor the Book Value for all the equipment constructed or systems installed up to the Termination Date, as duly certified by a reputable auditor and approved by BMC.

27.5.4 In case of termination of the Contract at any time during Phase 4 due to either a BMC Event of Default or a Contractor Event of Default, BMC shall pay the Contractor the Book Value for all the equipment constructed or systems installed up to the Termination Date, as duly certified by a reputable auditor and approved by BMC. BMC shall have the right to call the whole amount of the Performance Guarantee submitted by the Contractor if the termination of the Contract is due to a Contractor Event of Default.

27.5.5 All rights, titles and interests in and to all improvements and equipment constructed or systems installed shall vest in BMC after payments made to the Contractor and free and clear of all and any liens and encumbrances created or caused by the Contractor. The Contractor shall surrender possession of the said equipments and systems to BMC in good repair and condition, reasonable wear and tear accepted.

#### **28. SETTLEMENT OF DISPUTES**

*Amgr*

*12*  
*05/10*



### 28.1 Consultation

Both Parties agree that in the event any dispute, controversy or claim arising between the Parties out of, under or in connection with this Contract, or in the interpretation of any of its provisions, including any question regarding its existence, validity or termination, the Parties shall meet promptly on the request of either Party in an effort to resolve such dispute, controversy or claim through consultation. If a settlement is not reached pursuant to this Article within thirty (30) days of the said request, then the Parties shall refer their dispute to the Independent Energy Auditor in accordance with Article 28.2.

### 28.2 Independent Energy Auditor

Failing an amicable settlement pursuant to Article 28.1, any dispute, controversy or claim shall be referred by either Party to the Independent Energy Auditor. The Independent Energy Auditor, on the request made by a Party, shall use its best efforts to resolve the issue and arrive at a settlement mutually agreeable to both Parties. Decisions taken by the Independent Energy Auditor shall amount to recommendations to both Parties only and shall not constitute binding decisions therein.

### 28.3 Litigation

Any dispute, controversy or claim that has not been resolved between the Parties through an amicable settlement or based upon the decision taken by the Independent Energy Auditor in accordance with Articles 28.1 and 28.2 may then be submitted by either Party to the competent courts in Bhubaneswar.

## 29. TRANSFER

29.1 Six (6) months before the end of the Term, the Parties shall discuss whether this Contract shall be renewed or not. If the Parties decide not to renew the Contract, then all the Existing Lighting Facilities as may have been upgraded and maintained by the Contractor shall be transferred to BMC free of charge on the day immediately following the end of the Term.

29.2 The materials, equipment and systems installed by the Contractor in relation to the Existing Lighting Facilities and over which the Contractor has the title shall be transferred to BMC free and clear of all liens, encumbrances, mortgages, security interests and other claims of any kind.

29.3 The Contractor shall also transfer to BMC all of its operation manuals for the materials, equipment and systems installed by the Contractor.

29.4 In the event of early termination, the transfer shall take place on the next day immediately following the Termination Date.

## 30. GOVERNING LAW AND LANGUAGE

### 30.1 Governing Law

This Contract is governed by and construed in accordance with the Laws of India and the State of Odisha.





---

**30.2 Language**

This Contract is written in the English language. All communications and information provided should be in writing and in the English language only.

**31. MISCELLANEOUS**

**31.1 Assignment**

Neither BMC nor the Contractor shall without the express written consent of the other Party assign or charge to any third party this Contract or any part thereof, or any right, benefit, obligation or interest therein or thereunder.

**31.2 Entire Agreement**

This Contract constitutes the entire agreement between the Parties, and no alterations, changes or additions thereto shall be made, except in writing and approved by both Parties. This Contract supersedes all communication, negotiations and agreements (whether written or oral) between the Parties made prior to the Effective Date with respect to the Services.

**31.3 Amendments**

Any amendment, addition or variation to this Contract shall be valid and binding only if in writing and only if signed by the authorised representatives of both Parties.

**31.4 Severability**

Should any provisions in this Contract be invalid, illegal or unenforceable or be held invalid, illegal or unenforceable by any competent tribunal or court, the remaining provisions of this Contract shall remain valid and enforceable.

**31.5 No Partnership**

This Contract does not constitute a joint operation or partnership in the legal sense between the Parties. The Contractor is a service provider to BMC.

**31.6 Schedules**

This Contract includes the following Schedules, each of which is incorporated herein.

- Schedule 1 Scope of Services
- Schedule 2 Technical Specifications of the Project
- Schedule 3 Monitoring and Verification Plan
- Schedule 4 Scope of Work of the Independent Energy Auditor
- Schedule 5 Performance Guarantee
- Schedule 6 Trust and Retention Account Agreement
- Schedule 7 Form of Direct Agreement
- Schedule 8 Letter of Comfort

dm  
5/10

30  
05/10

IN WITNESS WHEREOF, the Parties, intending to be legally bound, have caused this Contract to be executed in two (2) copies by their duly authorised representatives on 5 October 2013.

<p>SIGNED, SEALED AND DELIVERED <i>5/10/13</i></p> <p>For and on behalf of Bhubaneswar Municipal Corporation Sanijb Kumar Mishra Municipal Commissioner <i>sm</i></p>	<p>SIGNED, SEALED AND DELIVERED <i>05/10/13</i></p> <p>For and on behalf of Super Wealth Financial Enterprises Private Limited by: Manik Kshetrapal Project Co-ordinator</p> 
<p>In the presence of:</p> <p>1. T. Binod Kumar Shrestha, <i>Mani</i> City Engineer, BMC - Bhubaneswar.</p> <p>2. R. N. SAMANTARAY <i>for 2nd authorized rep</i></p> <p><i>5/10/13</i></p>	

*05/10*

---

**Schedule 1.**  
**Scope of Services**

As from the Commencement Date and throughout the Term, the Contractor shall carry out the following key activities:

- Conducting a detailed asset survey, feeder wise marking of poles in Phase 1 and creation and maintenance of asset database during the Term of the Project;
- Metering all fixtures supplied through street lighting phase/feeders considering optimisations required for enabling metering/ installation of feeder panels on switching points;
- Witnessing the TPEA verification and energy baseline consumption norm for the Existing Lighting Facilities covered under the Project Area;
- Identifying suitable ECMs and implementing them on the respective metered/handed over points/stretches;
- Operating and maintaining the covered street lighting fixtures, including making replacements during the Term of the Project, in line with good industry practice and relevant applicable standards;
- Deputing qualified staff to carry out installation and maintenance of energy efficiency technologies during the Term of the Project;
- Ensuring compliance with all safety standards and fulfilling all statutory obligations in respect of the deployed staff at its own cost during the Term of the Project;
- Establishing a central monitoring centre for remote operations and monitoring of the entire population of handed over points; such monitoring centre shall also host a call centre facility for logging and tracking resolutions of citizen complaints regarding street lighting;
- Reporting the performance and functioning of street lighting systems covered under the Project to BMC on a daily/weekly/monthly basis in accordance with the stipulated procedures;
- Submitting a monthly Energy Savings report for every billing period along with its invoice for release of payment from BMC;
- Ensuring knowledge transfer and training of BMC staff for operation and maintenance of new energy efficient technologies installed and submitting copies of warranties to BMC;
- Transferring the street lighting system in working condition to BMC at the end of the Term.

dm  
5/10

dm  
05/10



**Schedule 2.**  
**Technical Specifications of the Project**

Standards Applicable to Street Lighting System of BMC

The National Lighting Code of the Bureau of Indian Standards (IS)- SP 72, 2010, IS 1944, IS 1977 and IEC Standards shall be complied for design and development of street lighting calculations, selection of lighting fixtures, lighting technologies, pole structure and erection, cable selection and sizing, insulation requirements, conductor specifications, etc.

**Table 1 : Standards applicable to BMC Street Lighting System**

Sr. No.	Standard	Description of Standard	Applicable to / Comments
1	SP 72, 2010 (Part 3) (also known as National Lighting Code, 2010)	Electric light source and their accessories	
2	SP 72, 2010 (Part 4)	Luminaires	
3	SP 72, 2010 (Part 6)	Exterior illumination	
4	SP 72, 2010 (Part 8)	Road lighting	
5	SP 72, 2010 ( part 9)	Energy effective lighting systems	
6	SP 72, 2010 (Part 10)	Installation aspects	
7	SP 72, 2010 (Part 13)	Lighting maintenance	Maintenance of lighting installations
8	IS 1944: 1970	Code of practice for lighting of public thoroughfares	Classification of road; Standard for road lighting
9	Guiding principles of the Bureau of Energy Efficiency Lighting Code, 2006	Nine point methodology	Lux level measurement on the stretch of road, post implementation of the ECMs, as described in Article 16.3
10	IS standards mentioned as necessary adjuncts under SP 72	All IS standards mentioned as necessary adjuncts under SP 72 for the various parts mentioned above	
11	IS 8130-1984	Specifications for conductors for insulated cables	Aluminium conductors
12	IS 5831	Specifications for PVC insulation and sheath of electric cables	Inner sheath of cables
13	IEC 60947	IEC standards for low voltage	Circuit breakers and

*Amir*

*Dr*  
*05/10*

Sr. No.	Standard	Description of Standard	Applicable to / Comments
		switchgear and control gear	contactors
14	IEC 6100-3-2	Limits for harmonics current emission	Limits for harmonics for low-voltage equipment with rated current under 16 A
15	IS 13021 (Part 1 and Part 2)	Ballast shall satisfy the power and current consumption requirement at rated voltage	Electronic ballast
16	IS 6842	Electromagnetic radiation levels	Electronic ballast
17	IS 9974 (part 1)	General requirement and test for HPSV lamps	HPSV lamps
18	IS 2418 ( Part 1) 1977	General lighting service part 1 general requirement and test	FTL tube lights
19	IS 15111 (Part 2) 2002	Performance requirement	Self-ballasted general lighting
20	IS 6616-1982 (reaffirmed 2001)	HPSV lamps ballast	
21	IS 9974 (Part 1) 1981	HPSV lamps	
22	IS 10322 (Part 5/Sec 3, reaffirmed 2005)	Control gears	
23	IS: 1569 - 1976 (Reaffirmed 2001) (Incorporating Amendment No. 1)	Condensers	
24	IS: 10276 - 1982(Part I & II)	Lamp holders	
25	IS 2418 ( Part 1) 1977 (Part 2 ) and IS 15111 (Part 2) 2002	Tube lights	
26	IS 3043	Code of practice for earthing	
27	IS 7752 (Part 1) : 1975	Guide for the improvement of power factor in consumer installations: Part 1 low and medium supply voltages	
28	IS 3961	Recommended current ratings for cables	Cables used by the contractor (if applicable)

Am  
5/11

Am  
25/10

Sr. No.	Standard	Description of Standard	Applicable to / Comments
29	SP 30 2011 National electrical code - Part 5, sections 1,2, 3	Section 1 Public Lighting Installations, Section 2 Temporary Outdoor Installations, Section 3 Permanent Outdoor Installations	
30	IS 16107	Luminaires Performance (Part 1 and Part 2)	LED lamps
31	IS 15885 (Part 2/Sec 13) : 2012	Lamp control gear	LED lamps
32	IS 16106 : 2012	Method of electrical and photometric	LED lamps
33	IS 16105 : 2012	Method of measurement of lumen maintenance of LED sources	LED lamps
34	IS 16104 : 2012	Electronic control gear for LED lamps	LED lamps
35	IS 16102 : 2012	Performance requirement for self-ballasted LED lamps	LED lamps
36	ANSI C136.38-2009		Induction lamps

The Bidder should adhere to SP 72 (Part 8), IS 1944 (Parts 1) and IS 1970 (Part 2) providing code of practice for lighting of public streets and the street categorisation criteria as detailed in **Table 2**.

5/1x

05/10



Table 2 : Road Classes as per SP 72 (Part 8), IS 1944 (Part 1) and IS 1970 (Part 2)

Main Roads Subdivided into Two Categories	
<b>Class A</b>	
<b>Class A1</b>	Important routes with rapid and dense traffic where safety, traffic speed, and driving comfort are the main considerations
<b>Class A2</b>	Main roads with considerable volume of mixed traffic, such as main city streets, arterial roads and thoroughfares.
<b>Class B</b>	
<b>Class B1</b>	Secondary roads with considerable traffic such as main local traffic routes, shopping streets
<b>Class B2</b>	Secondary roads with light traffic
<b>Class C</b>	Lighting for residential and unclassified roads not included in previous groups
<b>Class D</b>	Lighting for bridges and flyovers
<b>Class E</b>	Lighting for town and city centres
<b>Class F</b>	Lighting for roads with special requirement such as roads near air fields, railways and docks

With reference to above road categorisation criteria and information collected through field survey, the roads to be covered under the ESCO projects are broadly classified as Class A and Class B roads. The illumination levels required to be maintained for lighting installations on different classes of roads as per Standards are detailed in **Table 3**.

dm  
5/10

dm  
05/10

**Table 3 : Standard Illumination Ratios for Road Classes defined in SP 72 (Part 8), IS 1944 (Part 1) and IS 1970 (Part 2)**

Classification	Average Illumination to be maintained during operational hours excluding off peak hours (lux)	Ratio Minimum to average illumination	Minimum illumination to be maintained during off peak hours
Class A1	30	0.4	12
Class A2	15	0.4	6
Class B1	8	0.3	2.4
Class B2	4	0.3	1.2

For non-standard stretches, i.e. on switching points where more than 50% of the poles have a span of 30

Meters or more for A1 & A2 Roads and of 24 meters or more for B1 & B2 Roads, the Contractor shall be required to maintain the existing baseline lux levels, to be measured in accordance with the methodology prescribed for non-standard stretches in Schedule 4, or meet the values prescribed in the table 3 above, whichever is higher.

In addition to Class A and Class B roads few areas internal to the wards and by-lanes also consist of class C type of roads.

#### Operation & Maintenance of Street lighting System

Design parameters for road lighting as per IS 1981 and best practices for energy efficient street lighting project should be adopted.

The Contractor must ensure that all the street lighting fixtures shall remain ON for an average of eleven (11) hours a day. Off peak hours will be from 11:00 pm to 5:30 am in all seasons.

Non glowing lamps must be repaired within forty-eight (48) hours of the fault being detected.

#### Lamps

All lamps are to be compliant with the SP 72 specifications as well as the applicable IS specifications

#### Luminaires

All lamps, luminaires and gears/ballasts supplied under the project should be procured from ISO 9001 and ISO 14001 certified manufacturers. All the luminaires should comply with SP 72 (Part 4) specifications for luminaires and the Bidders shall provide following information for proposed luminaires before the TPEA to the Independent Energy Auditor.

- Technical catalogue of products
- Lumen depreciation curves of lamps
- Power and lumen output at different voltages

5/10

5/10

- Polar diagram of luminaires
- Printout of computer aided calculations for all parameters
- Lamp lumen maintenance and survival test data
- Manufacturers type test certificate of lamp, luminaires and gears from government accredited test laboratories /R&D labs to be provided.

#### Power Conditioning Feeder Panels

The design and operation of feeder panels shall comply with SP 72 Part 8 of National Lighting Code 2010. The typical specifications for the power conditioning panels shall be as follows:

- Feeder panels should have GPRS/GSM based remote streetlight monitoring system with capacity for self-protection from short-circuit, over voltage and anti-theft alert
- The rating of the streetlight controller should be at least one point three (1.3) times the lighting load as measured during the initial studies
- Energy meters to be installed in separately sealable and open able compartment within the feeder panels as per the following specifications:
  - Energy meters should have accuracy class of Class 1 or better, in compliance with the specifications of CESU
  - Meters could be either three phase whole current or CT operated for LT as may be required based on the load connected to the feeder panel. The space to be created in the feeder panel for housing the meters should consider the same.
  - Energy meters should be capable of logging parameters for each fifteen (15) minute time block with stamping of date and time. Such data logs should be retained in the energy meters for a period of sixty (60) days or more.
  - Such energy meters should record the following minimum parameters:
    - Phase to neutral voltages
    - Phase-wise current
    - Phase-wise power factor and frequency
    - Total active power
    - Total reactive power
    - Total active energy
    - Total reactive energy
    - Total KVAH energy
  - Meters should have requisite port for enabling remote reading and for connection of modem for the same;

dm  
5/10

dm  
05/10



- Energy meter specifications should meet the minimum specifications specified by the distribution utility, CESU and a sign-off on the same shall be obtained from CESU prior to finalizing the specifications;
  - Energy meters shall be tested, installed and sealed in accordance with procedures specified by CESU;
  - A signoff from CESU on the design and specifications of the compartment in the feeder panel where the meters are to be housed is also recommended;
- Bidder has to install appropriate power conditioning devices to protect the new energy efficient technologies and components of feeder panels from damage. The power conditioning devices needs to accommodate, on a dynamic basis variations in the quality of power supplied by CESU (including voltage variations and harmonics) to ensure performance of the lighting system. Standards stipulating the characteristics of electricity supplied by public distribution networks would not be applicable on the utility.
  - Compensation mechanisms should ensure the power factor above zero point nine (0.90) at the feeder panel
  - Any transition to dimming phase should not have any black-out time for the lighting system
  - The bidders should always ensure that the system is capable to capture live data and record it at variable time-intervals. Following parameters should be recorded for every 60-120 minutes time interval:
    - Voltages
    - Current
    - Power factor
    - Active power (kW)
    - Apparent power (kVA)
    - Metering kWh cumulative
    - Metering kVAh cumulative
    - Number of hours the lamps were glowing
    - Special emergency on/off facility with wireless control.
    - Benchmarking capacity so as to generate alert SMS for:
      - Phase-wise currents on crossing threshold values
      - Phase-wise voltages on crossing threshold values
      - MCB trips
      - Theft alerts
      - Group failure of lights

Am 5/1x

Am  
05/10

- Contactor failure
- No output supply
- Alert SMS shall be forwarded to five (5) phone numbers.
- GPRS/GSM modem should be used
- Minimum data storage for twelve (12) months (if data logged at one (1) hour intervals)
- Enclosure box of feeder panels shall be IP-54 compliant

Central Control Unit (MCU – Master) should provide additional features and daily user defined report. These features should include:

- Support to export reports on website to other application formats like MS Access, DB, SQL, Oracle etc.
- Printout facility available on web pages
- Inbuilt scalability to support large lighting network. Upton 250 no's of RTUs should be possible to be controlled from one Central Control Unit
- High up-time and immediate fault rectification through SMS intimation to maintenance team
- Simplified maintenance
- Real-time control

#### Faults Monitoring:

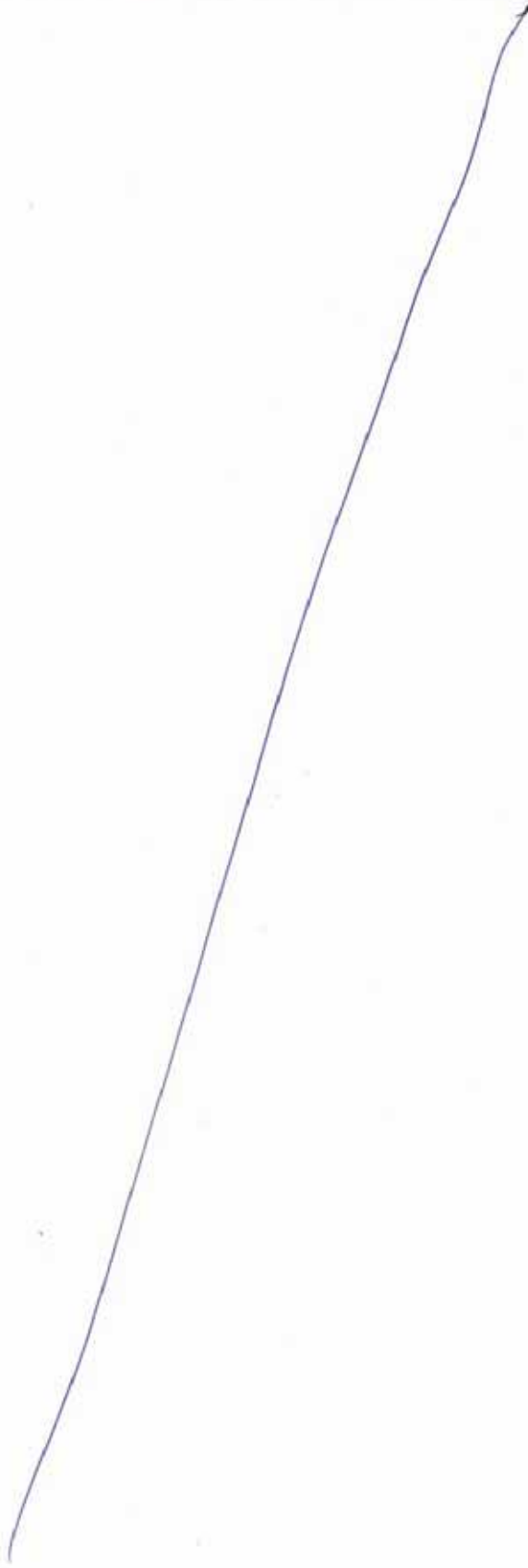
- Under/over voltage detection
- Main breaker error
- Contactor fault
- Circuit breaker off
- Circuit phase errors (fuse, breaker, etc.)
- Main power failure
- Leakage to ground
- Manual switch activated
- Phase current out of range
- Control cabinet door open
- Lamp failures

dy  
5/7x

dy  
05/10



an



Dr  
05/10





### Schedule 3. Monitoring and Verification Plan

The monitoring and verification mechanism for the Project considers the establishment of energy baseline consumption norm for each switching point through an independent Third Party Energy Audit (TPEA) to be undertaken by an Independent Energy Auditor appointed by BMC (and paid for by the ESCO). The savings for the purpose of monthly Contractor payments will be derived in accordance with actual consumption as recorded by the energy billing meters for a particular billing month, giving due consideration to factors such as actual availability of power, number and duration of non-functional street lighting fixtures, lux levels maintained on the street lighting stretches, etc. in accordance with the procedure outlined below. It is important to note that particular street lighting stretches shall be handed over to the Contractor for implementation of ECMs by BMC only once the installation of feeder panels (including meters) and the TPEA for such feeders/ stretches has been completed. The monitoring and verification mechanism shall include the following in their order of sequence:

- (a) **Asset Marking and Meter Installation by the Contractor:** The Contractor shall conduct a detailed asset survey and complete pole marking using nomenclature approved by BMC. Such nomenclature shall capture details such as the particular switching point/ energy billing meter or connection number, street, pole number, fixture type etc. Such pole number should be painted or put at a legible point on each street lighting pole at a height of five (5) foot from the ground level with a minimum font size of three inches (3").

The coding/ nomenclature for numbering shall clearly indicate the following:

- i. Utility electricity billing meter/ connection or switching point;
- ii. Street;
- iii. Pole number on the particular switching point;
- iv. Type of fixture; and
- v. Number of fixtures.

The following recommended nomenclature (AAA/ AAA/ NNN/ A/ N) shall be adopted for the purpose of asset/ pole marking, with due approvals from BMC if any changes are made:

Parameter	Utility Electricity Billing Meter/ Connection or Switching Point	Street	Pole Number on the Switching Point	Type of Fixture	Number of Fixtures
Nomenclature	AAA (Alphabetical code comprising three characters)	AAA (Alphabetical code comprising three characters)	NNN (Numeric code comprising three digits)	A (Number code representing type of fixture installed on the particular pole)	N (Number of fixtures installed on the particular pole)

Amg  
5/10

m  
05/10  
42

The Contractor shall provide details of the nomenclature developed for street light numbering to BMC and update BMC for any additions or deletions that may be necessary from time to time. Also, the Contractor shall provide the detailed asset inventory and numbering to BMC for each stretch/ metering point once they are completed.

The Contractor shall thereafter install the feeder panels comprising of the metering unit in accordance with the meter specifications notified by CESU. For un-metered stretches where the ESCO meters shall become the energy billing meters, such meters shall be tested from the CESU lab and installed and sealed as per CESUs procedures.

- (b) **Third Party Energy Audit (TPEA):** BMC shall invite tenders from independent energy auditors to establish the energy baseline consumption norm of the metered street lighting stretches. BMC shall select an Independent Energy Auditor from the bids received based on the technical and financial criteria specified in the tender documents. The Contractor shall bear the cost and expenses of the Independent Energy Auditor.

BMC, the Contractor engineers and the Independent Energy Auditor will form a team. The Independent Energy Auditor will install the programmable calibrated data loggers in series with the feeder panel meters at all the switching points. The Independent Energy Auditor shall verify and record the following to create an energy baseline consumption over three (3) days in a sequence:

- i. Switching on-time for the street lighting stretch;
- ii. Switching off-time for the street lighting stretch;
- iii. Hours/ duration of actual availability of power supply;
- iv. Number and duration of working street lighting fixtures;
- v. Consumption recorded in the data logger; and
- vi. Average lux output of lamps per switching points. Average lux output of sample 5% of street lighting points per switching point (to be selected by the Independent Energy Auditor in a manner that it is adequately spread across the length of the stretch) for non-standard stretches shall be undertaken by the Independent Energy Auditor for establishment of baseline for lux level on such stretches/ switching points. The lux level measurements for which shall be done in accordance with the methodology prescribed for non-standard stretches in Schedule 4 on Scope of Work of the Independent Energy Auditor.

The average of all the sample points on a particular stretch or the values in table 3 above shall lux level for that stretch by the Independent Energy Auditor.

The data shall be used to calculate the average hourly consumption on the given stretch/ street lighting system with due adjustments on account of non-functional street lighting fixtures/ duration of power availability. The average hourly consumption should reflect the consumption in the as-is system assuming all street lighting fixtures are in working condition.

Smg  
5/7x

Dr  
05/10



During the TPEA, if the difference in energy consumption of data loggers installed by the Independent Energy Auditor and meters installed by the Contractor is found to be more than three per cent (3%) then the Contractor shall be required to get such meters tested in CESU lab and if found inaccurate the same shall be recalibrated or replaced by the Contractor.

The Independent Energy Auditor shall then certify the per fixture hourly consumption norm or the baseline for the particular stretch with due consideration to the actual availability of power, as recorded in the data logger and the actual working status of street lighting fixtures. Such baseline figures shall be signed off by both BMC and the Contractor in addition to the Independent Energy Auditor and shall become binding for the entire life of the Project. The Contractor shall implement its ECMs on each stretch once the TPEA is conducted and energy baseline consumption is determined.

- (c) **Monitoring and Verification Protocol during the Term of the Project:** This protocol shall apply to the street lighting fixtures which are declared commissioned post implementation of the ECMs by the Contractor and are handed over to the Contractor in accordance with Phase 3.

The Contractor shall, on a daily basis record and report to BMC, the energy consumption, power outage, voltage dimming hours, hour wise number of estimated functional lamps etc. as per the formats provided in this Contract. The Contractor shall submit to BMC daily reports containing the data regarding the working of various handed over street lighting fixtures in accordance with the formats provided in the Annexure:

- Daily non-functional lamp report
- Daily report for switching point
- Daily overall report for entire Project

The identified non-functional street lighting fixture must be replaced the very next day after such event occurred and appropriate records must be created for such work undertaken on a particular feeder/ switching point during a particular energy billing month.

The Contractor shall in the same monthly billing period (i.e. the same initial and final meter reading dates) as that followed by CESU, issue its invoice providing detailed calculations of the actual Energy Savings achieved with respect to the energy baseline consumption norm determined through the TPEA. The following procedure shall be adopted for the purpose of invoicing:

- i. The billing to be done by the Contractor shall outline the following aspects:
  - Start Date/ End Date for billing period and corresponding meter readings;
  - Day wise adjustments made in baseline to be used for calculating actual Energy Savings achieved:
    - Duration of power outage;
    - Number of non-functional points along with duration that such points remained non-functional;

dmg  
5/5

05/10



- Proportionately adjusted baseline shall be calculated for each day based on above;
- ii. The difference between the adjusted baseline and the actual consumption recorded for the particular day shall be considered as the demonstrated savings for that particular day.
- iii. The demonstrated savings and the total adjusted baseline for each particular day during the month/ billing period shall be added together to calculate the total demonstrated energy savings and the total consumption as per the adjusted baseline.
- iv. The overall format for switching point wise and overall energy savings achieved during any billing period shall be submitted in accordance with the Monthly Energy Savings Calculation Format provided in the Annexure.
- v. The invoices shall be in accordance with the eligibility for Energy Savings Fee in accordance with Article 16.1.

Invoices should clearly highlight the actual energy consumption, total outage hours, adjustments towards non-functional points for their respective durations etc. as per the detailed format provided in the Annexure.

- (d) **EPC:** BMC shall obtain a sample five per cent (5%) stretches verified through the Independent Energy Auditor to review the compliance of the lux levels being maintained by the ESCO and cross checking of the energy savings claims being made by the Contractor on a semi-annual basis.

- (i) The nine-point method for lux level measurements, as per the guiding principles of the Bureau of Energy Efficiency Lighting Code,
- (ii) For selected sample points falling on non- standard stretches, i.e. on switching points where more than 50% of the poles have a span of 30 Metres or more for A1 & A2 Roads and of 24 Metres or more for B1 & B2 Roads, the same Lux level methodology prescribed at Schedule 4, 2(e) shall be followed for the lux level measurements during the post commissioning phase.

- (e) Accounting for voltage variations during baseline study

- i. In the event if the input voltage is not found to be within the acceptable range for any particular switching point(s) by either of the Parties, such Party may request for repeat of the TPEA exercise. Such request for the repeat of the TPEA for specific switching point(s) shall have to be completed within the timelines as specified for TPEA in the contract.
- ii. During the initial survey phase, if the Contractor feels that there is substantial voltage ( + or - 25 %) drop at the tail end of street lighting system covered under any particular switching point(s), due to infrastructure deficiencies, which is substantially deflating the baseline consumption norm, it may request BMC to complete the impending infrastructure works prior to the TPEA exercise. Such issues may also be highlighted or flagged by the Contractor during the TPEA exercise for specific switching point(s), for review by the IEA

5/10

05/10

\_\_\_\_\_

\_\_\_\_\_

du

Dr  
05/10<sub>46</sub>

## Monitoring and Verification Formats

[illegible]

2/5/19

05/10



DAILY REPORT FOR SWITCHING POINT

Report Date

Feeder Panel/E.B No.

Switching Point No./Name

Hours	Meter No.	Energy Consumption (kWh)	Avg. I/P Voltage (V)	Avg. O/P Voltage (V)	Current A	kW	P.F	Power Availability (in mins.)			Burning Load (Watts)						Non Burning Load (Watts)						Remarks																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
								Phase 1	Phase 2	Phase 3	40 W	70 W	150 W	250W SVL	250W SVL	400W MHL	400W MHL	LED 70 W	40W TL	70 W	150 W	250W SVL		250W SVL	400W MHL	400W MHL	LED 70 W																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
17 to 18																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

5/12

05/10

DAILY OVERALL REPORT - FOR ENTIRE PROJECT

[illegible]

57x

05/10

## Report Date

[illegible]

5/15

05/10



---

**Schedule 4.**  
**Scope of Work for Independent Energy Auditor**

also

The scope of work of the Independent Energy Auditor for the Third Party Energy Audit to be undertaken in the presence of both BMC and ESCO for establishing the energy baseline consumption for street lights is as follows:

**1. Scope for joint third party energy audit for energy baseline consumption for existing system for each switching point proposed to be covered under the Project**

**1.1. Verification of asset data / marking**

- (a) Verification and certification of switching points (metered connection points or feeder panels) and inventory of street lighting assets, including the following:
- type of fixtures including wattages of bulbs, ballasts, chokes, etc. (as per actual consumption ) and total number of fixtures of each type;
  - total number and height of street lighting poles;
- (b) Switching point wise – Names of the streets to which the switching point electrical lighting circuit caters to, total length and widths of streets illuminated (lighting stretch catered to by the switching point);
- (c) Validation of switching point wise pole numbering/ marking, as done by ESCO;
- (d) Validation of single line diagram and indicative maps, if any, indicating location of switching point, metering equipment, fixtures, poles, etc.

**Measurements and analysis to be undertaken for a switching feeder post completion installation of feeder panel/ metering.**

- (e) Installation of data loggers calibrated and certified by a recognized laboratory in series with energy billing meters on each switching point on receipt of intimation from BMC/ ESCO. The responsibility of installation and safety of data loggers shall lie with the Independent Energy Auditor;
- (f) Isolation of the voltage dimming, remote switching and all other circuits (if any) in the feeder panels installed by ESCO, except the energy billing meter, from the street lighting circuit;
- (g) Measurement of the electrical parameters, such as voltage, current, active/ reactive power, power factor, etc. using calibrated instruments/data loggers for three (3) consecutive days (recording hourly energy consumption) on all street lighting feeders, for the entire duration of the time; Presence of BMC and CESU members at the site for some time, during measurement is essential.
- (h) Logging of data on actual power availability during street lighting operating hours for the period during which measurements of electrical parameters are undertaken;

dm  
5/10Dr  
05/10

- 
- 50
- 05/10
- (i) Half-hourly verification of the number of points glowing and not-glowing during street light operating hours for each day during which measurements of electrical parameters are undertaken;
  - (j) The hourly data for switching points/ feeders must be developed in accordance with the formats given in the metering & verification plan for the period of three (3) days;
  - (k) Calculation of per switching point/ per feeder energy baseline consumption norm based on kWh consumption per fixture per hour data and number of each of the type of fixtures connected to the switching point from the electrical measurements undertaken, after duly adjusting for the duration for which power remained unavailable and fixtures which were not glowing/ operational (with due consideration to the actual duration for which such fixtures remained non-glowing). The energy parameters measurements for the entire period of three (3) days during which the audit was conducted shall be used for arriving at the energy baseline consumption norm; BMC should ensure that all fixtures connected to the switching point are in working condition when the intimation is given to the ESCO.
  - (l) Certification of switching point/ feeder wise energy baseline consumption norm based on kWh/ fixture/ hour as the basis as described above.
  - (m) Average lux output of sample 5% of lamps (on non-standard poles) per switching point for non- standard stretches i.e. switching where more than 50% of the poles have a span of 30 Meters or more for A1 & A2 Roads and of 24 Meters or more for B1 & B2 Roads.

## 1.2. Switching point wise report submission

- (a) Detailed report on data collected and analysis of hourly energy consumption along with details such as power availability duration, glowing/ non-glowing status of fixtures should be summarized to demonstrate the certified energy baseline consumption norm for a particular switching point. For Non- Standard Stretches the Independent Energy Auditor shall certify the Lux Level Baseline as observed during the TPEA exercise and prescribe the applicable standards to be met by the Contractor during the post commissioning phase, in accordance with Schedule 2.
- (b) The reports should be submitted within five (5) working days from completion of field exercise for each switching point. The Independent Energy Auditor shall certify the per fixture hourly consumption norm or the baseline for the particular switching point catering to a particular stretch of street lighting fixtures.
- (c) Such baseline figures shall be signed off by both BMC and ESCO in addition to the Independent Energy Auditor and shall become binding for the entire life of the Project for the particular switching point.
- (d) Along with kWh consumption per fixture per hour data (baseline for the particular switching point) the number of each of the type of fixtures connected to the switching point shall be reported and accepted by all parties.
- (e) The ESCO shall implement its ECMs on each stretch once the TPEA is conducted and the energy baseline consumption is determined and formally signed off.
- (f) Those ECMs which come embedded with the feeder panel shall be disabled/ by passed by the ESCO before the TPEA, as mentioned earlier in 1.1(f).

## 2. Undertaking periodic third party verification of lux level measurements on street lighting fixtures on sample basis

5/10

05/10

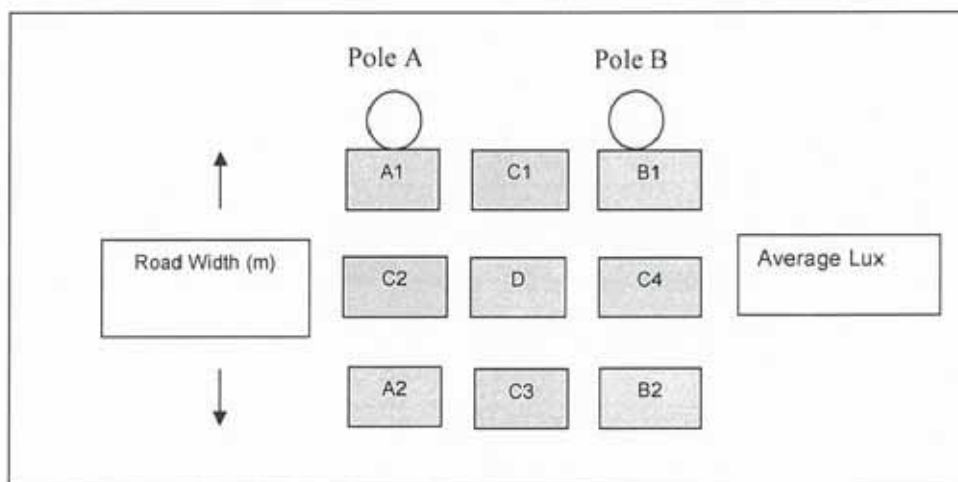


05/10

- (a) Undertaking lux level measurements on randomly selected five per cent (5%) of the street lighting fixtures covered under the Project. Such sampling may be decided in mutual consultation with BMC. In case of non agreement in sampling during mutual consultations, fifty per cent (50%) of the sample size (two point five per cent (2.5%) of street lighting fixtures) would be decided by BMC.
- (b) The Independent Energy Auditor shall be responsible for arranging all requisite measuring equipments duly calibrated and certified from a recognized laboratory required for undertaking the lux level measurements on the selected sample points in adequate quantity.
- (c) The Independent Energy Auditor shall deploy adequate number of personnel required for undertaking the lux level measurements on the selected sample within the timeframe specified by BMC.
- (d) Such lux level measurements shall be undertaken in accordance with standard procedures including measurements along the pole, under light fittings, middle of the road and both edges of the road. Between two poles, the lux level should be measured towards verge, middle of the road and both edges of the road.

The procedure of calculating the lux level measurements based on the nine point methodology to be adopted for the lux level measurements, as per the guiding principles of the Bureau of Energy Efficiency Lighting Code, 2006, shall be as outlined below:

- The measurements should be conducted in night. The lamps must be switched on at least thirty (30) minutes before the measurements to allow for the lamps to completely warmed up;
- The dimming controls should be fixed at different levels as agreed in energy performance contract and simultaneous power and lux measurements should be carried out for selected lamps;
- Stray light from the surrounding areas should be minimized at the time of measurements;
- The measurement height should be one (1) meter above the road surface;
- Illumination level (lux levels) shall be measured using a calibrated lux meter by the following method (Nine point method). The layout of a 9 point measuring grid (for one span) should be as below. The same methodology would be followed for all types of roads.



57x

05/10



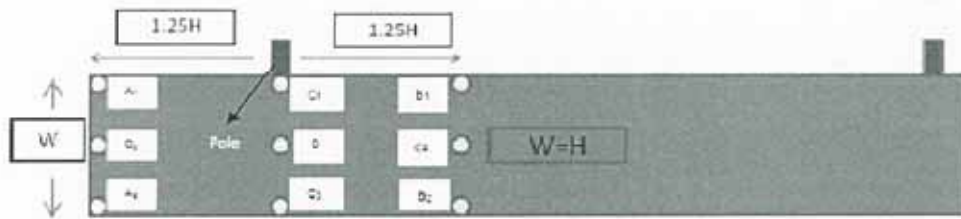
$$\text{Average illuminance, } E_{av} = (A1+A2+B1+B2)/16 + (C1+C2+C3+C4)/8 + D/4$$

- (e) The Independent Energy Auditor shall undertake the exercise of determination of baseline lux levels in accordance with the methodology being prescribed herewith for stretches identified as non-standard stretches by the Contractor in the Asset Marking exercise. During the TPEA the Independent Energy Auditor may if necessary, undertake sample measurement of spans to verify the proposed classification of the switching point/ stretch as non-standard. Any stretch may be reclassified as a standard stretch by the Independent Energy Auditor during TPEA, if 50% or less of the poles have a span of 30 Metres or more for A1 & A2 Roads and of 24 Metres or more for B1 & B2 Roads.
- (f) For sample points falling on non-standard stretches, the Independent Energy Auditor shall undertake the Lux level measurements in accordance with the modified nine-point methodology elaborated below:
- The measurements should be conducted in night. The lamps must be switched on at least thirty (30) minutes before the measurements to allow for the lamps to completely warmed up;
  - The dimming controls, if any should be fixed at different levels as agreed in energy performance contract and simultaneous power and lux measurements should be carried out for selected lamps;
  - The mounting height of existing fixture is taken as the width of road for a single sided road while for central arrangement; the width on either side of the pole is taken as 0.8 times the pole height.
  - The adjacent points to the poles selected for baseline establishment under study are switched-off at the time when measurements are being taken. This is to ensure that the lux level measurements correspond only to the pole being considered and is not contributed by adjacent poles. Additionally, Stray light from the surrounding areas should be minimized at the time of measurements;
  - The measurement height should be one (1) meter above the road surface;
  - Illumination level (lux levels) shall be measured using a calibrated lux meter by the following method. The layout of a 9 point measuring grid (for one span) should be as below, on non- standard stretches:

dm  
5/1x

05/10

1. Modified lux measurement for road / stretch with lighting on poles placed by the side ( single sided pole )

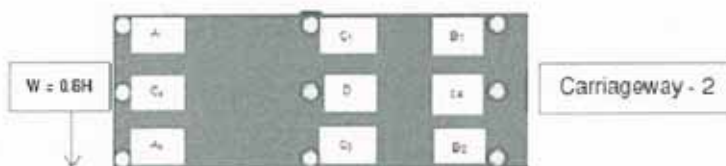
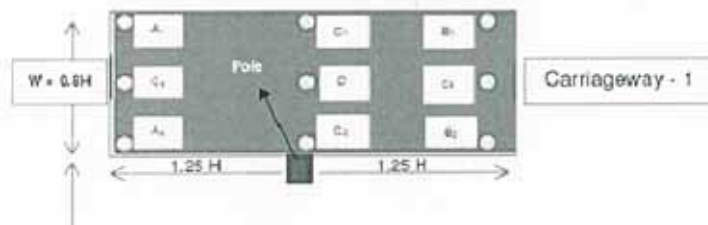


H = Height at which fixture ( with lamp ) is mounted on the pole, W = Width of road

Avg. illuminance,  $E_{av} = (A1+A2+B1+B2)/16 + (C1+C2+C3+C4)/8 + D/4$

Points indicated in yellow dots as A1, A2, B1, B2, C1, C2, C3, C4, D are measurement points.

2. Modified lux measurement for road / stretch with lighting on poles placed on centre (central pole or butterfly type)



Avg. illuminance,  $E_{av}$  for carriageway 1 =  $(A1+A2+B1+B2)/16 + (C1+C2+C3+C4)/8 + D/4$

Avg. illuminance,  $E_{av}$  for carriageway 2 =  $(A1+A2+B1+B2)/16 + (C1+C2+C3+C4)/8 + D/4$

Points indicated in yellow dots as A1, A2, B1, B2, C1, C2, C3, C4, D are measurement points.

### 3. Report submission

The Independent Energy Auditor shall submit within five (5) days of completion of field exercise of measurements its detailed report meeting the following requirements:

- providing point wise results, giving the asset number indicated in the pole marking for each such point, the results of the lux level measurements;
- comparison of the results of lux level measurements with the recommended lux level for each point; and
- Percentage of points found to be compliant with the recommended lux level standards.

*Signature*

*Signature*  
05/10

---

The Independent Energy Auditor shall also provide detailed report of survey highlighting the above mentioned points and provide switching point/ street wise results of measurements with stress on bringing out instances where non-compliance is high.

4. **Disputes between the Parties as per Article 28 of the Contract**

Failing an amicable settlement pursuant to Article 28.1 of the Contract within thirty (30) days of receipt of the request provided therein, any dispute, controversy or claim shall be referred by either Party to the Independent Energy Auditor. The Independent Energy Auditor, on the request made by a Party, shall endeavour to resolve the issue and arrive at a settlement mutually agreeable to both Parties. Decisions taken by the Independent Energy Auditor shall amount to recommendations to both Parties only and shall not constitute binding decisions therein. If any dispute, controversy or claim has not been resolved between the Parties through an amicable settlement or based upon the decision taken by the Independent Energy Auditor, such dispute, controversy or claim may then be submitted to litigation as provided in Article 28.3 of the Contract.

for  
5/2

Dr.  
05/10



**Schedule 5.**  
**Performance Guarantee**

Super Wealth Financial Enterprises Private Limited  
c/o Dalal Desai & kumana  
Union Co-operative Insurance Building,  
2nd Floor, 23, Sir P.M. Road, Fort,  
Mumbai-400 001

[insert                      date]

Letter of Guarantee No.: [●]

Our client, Super Wealth Financial Enterprises Private Limited (the "**Contractor**"), has entered into an energy performance contract with the Bhubaneswar Municipal Corporation of the State of Odisha for the provision of operation and management services in the public street lighting sector in the city of Bhubaneswar (the "**Contract**").

We, [●] (the "**Bank**"), hereby unconditionally and irrevocably undertake to pay the Bhubaneswar Municipal Corporation any sums up to maximum amount of sixty (60) lakhs Indian rupees (the "**Maximum Amount**"), in connection with the Contractor's obligations under the Contract and in accordance with the following:

- (A) We shall pay you immediately upon your written demand and irrespective of any objection by the Contractor or any other party such amount or amounts as you may demand up to the Maximum Amount;
- (B) All payments made based on your demand shall be free and clear of, and without any present or future deduction for payment of, any taxes, levies, duties, charges, fees, deductions or withholdings of any nature whatsoever and by whomsoever imposed;
- (C) The undertakings contained in this performance guarantee constitute our direct and fundamental obligations and are unconditional and irrevocable. We shall not be excused from any or all of these obligations for any reason or reasons of whatever nature or source, such as change in the terms and conditions of the Contract or change in the scope or nature of the work to be performed by the Contractor, or any omission, act or proceeding by you or by a third party which would excuse or discharge us from the obligations and liabilities stated in this guarantee;
- (D) This performance guarantee shall remain valid and in full force and effect up to the end of the \_\_\_\_\_ day of the month of \_\_\_\_\_ of the year \_\_\_\_\_; and
- (E) This performance guarantee shall be governed by and construed in accordance with the laws and regulations of the India and any dispute with respect to this performance guarantee shall be resolved by the competent Indian courts.

The Bank  
[Authorised signatories]





**Schedule 6.**  
**Trust and Retention Account Agreement**

*[To be filled in after the award of the winning offer, prior to the execution of the Contract]*

**THIS TRUST AND RETENTION ACCOUNT AGREEMENT** (this "**Agreement**") is entered into on [●] by and among:

1. **Bhubaneswar Municipal Corporation** of the city of Bhubaneswar, State of Odisha, having its registered office at [●] and its legal representative being [●] ("**BMC**");
2. Super Wealth Financial Enterprises Private Limited, a company duly registered in India as per the Companies Act of 1956, as amended from time to time, located at [●] and its representative being [●], duly authorized ("**ESCO**"); and
3. [●], a bank duly registered in India, having its principal office at [●], and represented by [●] (the "**Escrow Agent**").

BMC, ESCO and the Escrow Agent are referred to herein collectively as the "**Parties**" and individually as a "**Party**".

**WHEREAS:**

- A. According to the energy performance contract entered into on [●] between BMC and ESCO (the "**EPC**"), BMC and the Escrow Agent shall establish an escrow account for the benefit of ESCO. BMC shall fund such account (pursuant to the terms of this Agreement), which shall serve to secure part of BMC's payment obligations towards ESCO under the EPC.
- B. The Escrow Agent is willing to serve as an escrow agent in accordance with the terms and conditions of this Agreement.
- C. Unless otherwise defined herein, all capitalized terms shall have the meaning ascribed to them in the EPC.

**NOW, THEREFORE**, the Parties hereto agree as follows:

**1. ESCROW ACCOUNT**

**1.1 Appointment**

BMC and ESCO hereby appoint the Escrow Agent to serve as the escrow agent for the purposes of this Agreement and subject to the terms of this Agreement and the Escrow Agent hereby accepts this appointment.

**1.2 Escrow Account**

Within five (5) Business Days of the date hereof, BMC and the Escrow Agent shall establish an escrow bank account denominated in Indian Rupees for the benefit of ESCO (the "**Escrow Account**").

**1.3 Deposit**

- 1.3.1 No later than three (3) months following the establishment of the Escrow Account in accordance with Article 1.2 above, BMC shall transfer an amount equivalent to what it used to pay for (i) three (3) months of electricity bills before the execution of the EPC, and (ii)

*Amg*

*05/10*

seventy-five Indian Rupees (Rs. 75 only) for the operation and maintenance of each street lighting fixture in the Project Area (as defined in the EPC) (the "**Initial Deposit**").

- 1.3.2 Each month following the Initial Deposit, BMC shall transfer into the Escrow Account, in immediately available funds, an amount equal to what it used to pay for (i) one (1) month of electricity bill before the execution of the EPC, and (ii) twenty-five Indian Rupees (Rs. 25 only) for the operation and maintenance of each street lighting fixture in the Project Area (collectively, the "**Deposit**"). The Deposit shall be held in escrow by the Escrow Agent until it is released in accordance with the terms and conditions of this Agreement.
- 1.3.3 Failure to comply with this Article 1.3 shall be deemed a BMC Event of Default under Article 27.2 of the EPC.
- 1.3.4 The Initial Deposit and the Deposits made each month by BMC shall be collectively referred to as the "**Escrow Amount**".

#### 1.4 Identification and Separation

The Escrow Agent shall clearly identify in its records the Escrow Account as an escrow account and shall keep the funds standing to the credit of the Escrow Account segregated from and not commingled with the Escrow Agent's own funds or the funds of any of its other customers or third parties.

#### 1.5 Fees

- 1.5.1 BMC shall bear the costs of the fees to be paid to the Escrow Agent for the establishment and management of the Escrow Account.
- 1.5.2 Any payment made by BMC under this Agreement shall be made from the following account or from such other account which BMC may designate from time to time:

Bank:  
Account number:  
BIC (SWIFT):  
Address of Bank:

#### 1.6 Escrow Account Statements

The Escrow Agent shall provide monthly statements regarding the Escrow Account to BMC and ESCO.

### 2. ESCROW AMOUNT

- 2.1 Promptly upon the Deposit being transferred to the Escrow Account, the Escrow Agent shall send to BMC and ESCO a notice informing them of the transfer.
- 2.2 The Escrow Agent shall hold the Escrow Amount in escrow for the sole benefit of ESCO. The Escrow Agent shall not release any of the Escrow Amount for any person other than ESCO. In particular, the Escrow Agent shall not accept any requests for withdrawals or transfers of the Deposit or the Escrow Amount from BMC for the benefit of BMC or any third party, unless it is made in accordance with this Agreement.
- 2.3 The Escrow Agent shall not apply any right of set-off against the Escrow Amount, grant any lien over the Escrow Amount, or apply any fee or deduction in relation to the Escrow Amount.

*Signature*

*Signature*  
05/10



- 2.4 At the end of each calendar year, the Escrow Agent shall transfer into an account of BMC as BMC shall designate, any amount exceeding an amount equivalent to the Initial Deposit. Thus, the Escrow Amount at the end of each calendar year shall be equivalent to the amount of the Initial Deposit.

### 3. PAYMENT

- 3.1 Each month, ESCO shall issue an invoice and send it to the Escrow Agent along with supporting documents, with a copy to BMC. Pursuant to the review of the supporting documents, the Escrow Agent shall pay ESCO seventy-five per cent (75%) of the amount mentioned on the invoice within five (5) Business Days following the receipt of such invoice.
- 3.2 The remaining twenty-five per cent (25%) of the amount of the invoice shall be paid by the Escrow Agent upon submission by ESCO of a written approval of its invoice by BMC. BMC shall provide its written approval (or disapproval with part or all of the invoice) within thirty (30) days following the receipt of such invoice.

In the event the written approval (or disapproval with part or all of the invoice) is not received from BMC within thirty (30) days of receipt of copy of invoice by BMC as provided in the above paragraph, the written approval from BMC shall be deemed to have been obtained by the ESCO and the Escrow Agent may release the remaining twenty-five per cent (25%)

- 3.3 Upon the expiry of the Term of the EPC, BMC shall send instructions to the Escrow Agent requesting him to release and transfer any due and payable amounts to the Contractor and any remaining amounts to be transferred to BMC.

### 4. OBLIGATIONS OF THE ESCROW AGENT

- 4.1 The obligations of the Escrow Agent under this Agreement are subject to the following terms:
- (a) the duties of the Escrow Agent are only as herein specifically provided, and are purely administrative in nature. The Escrow Agent shall neither be liable for, nor chargeable with knowledge of, the terms and conditions of any other agreement, instrument or document in connection herewith, including, without limitation, the EPC, and shall be required to act in respect of the Escrow Amount only as provided in this Agreement. This Agreement sets forth all the obligations of the Escrow Agent with respect to any and all matters pertinent to the Escrow Account contemplated hereunder and no additional obligations of the Escrow Agent shall be implied from the terms of any other agreement. The Escrow Agent shall incur no liability in connection with the discharge of its obligations under this Agreement or in connection therewith, except such liability as may arise from the Escrow Agent's negligence, willful misconduct or otherwise from any breach of this Agreement. Such liability, however, shall not exceed the amount of the Escrow Amount outstanding at the date of the said breach by the Escrow Agent;
  - (b) the Escrow Agent shall not be required to perform any acts which will violate any laws or regulations applicable in India and in the State of Odisha;
  - (c) in the event of any bankruptcy proceedings or enforcement proceedings against any of the Parties pursuant to applicable laws or regulations, the Escrow Agent shall, notwithstanding the provisions of this Agreement, act and perform in accordance with the applicable laws or regulations.

5/1\*

05/10

**5. REPRESENTATIONS AND WARRANTIES**

Each Party represents and warrants that, as of the date hereof and in the foreseeable future:

- (a) it has the authority to enter into this Agreement;
- (b) this Agreement constitutes a legally valid and binding obligation, enforceable against it in accordance with its terms;
- (c) its entry into and/or performance under this Agreement will not be in breach of any express or implied terms of any contract with or other obligation to any third party; and
- (d) it is solvent and able to perform all of its obligations under this Agreement.

**6. MISCELLANEOUS**

**6.1 Notices**

Any notice or other communication to be given or made under this Agreement to the Parties shall be in writing. Except as otherwise provided in this Agreement, such notice, request or other communication shall be delivered by registered mail or facsimile to the Party(ies) at the following addresses:

**BMC:**

Bhubaneswar Municipal Corporation  
Vivekanda Marg  
Bhubaneswar  
751014, Odisha  
Fax: [●]

To the attention of: Municipal Commissioner

**Escrow Agent: [●]**

**ESCO:**

Super Wealth Financial Enterprises Private Limited  
c/o Dalal Desai & kumana  
Union Co-operative Insurance Building,  
2nd Floor, 23, Sir P.M. Road, Fort,  
Mumbai-400 001  
Fax: [●]

**6.2 Entire Agreement**

This Agreement constitutes the entire agreement and understanding between the Parties with respect to its subject matter (i.e. escrow arrangement) and replaces and supersedes all prior agreements, arrangements, undertakings or statements regarding such subject matter.

**6.3 Amendments**

*5/1x*

*05/10*

No variation of or amendment to this Agreement shall be effective unless made in writing and executed by all the Parties hereto.

**6.4 Assignment**

Neither this Agreement nor any of the rights or obligations hereunder may be assigned by a Party without the prior written consent of the other Parties; provided, however, that ESCO shall be entitled, to the extent permitted by law and as may be required under its financing documents, to assign or create liens over its rights and interests under or pursuant to this Agreement.

**6.5 Severability**

Whenever possible, each provision of this Agreement shall be interpreted in such a way as to be effective and valid under law, but if any provision of this Agreement is unenforceable or invalid under law, such provision shall be ineffective only to the extent of such unenforceability or invalidity, and the remaining provisions of this Agreement shall continue to be binding and in full force and effect.

**6.6 Confidentiality**

**6.7** Unless otherwise determined by a competent jurisdiction, the Parties, their employees, representatives and agents shall keep the provisions of this Agreement strictly confidential and, except as may be required by law, shall make no disclosure thereof to any person, except the Parties' respective legal counsel and professional advisers, without the prior written consent of the other Parties.

**6.8 Termination**

This Agreement shall be automatically terminated upon the expiry of the Term of the EPC. It may also be terminated earlier if BMC and ESCO agree to terminate the Agreement and send a termination notice to the Escrow Agent.

**6.9 Dispute Resolution Mechanism**

**6.9.1** This Agreement shall be governed by and construed in accordance with the laws of India and the laws of the State of Odisha.

**6.9.2** If any dispute arises out of or in connection with this Agreement, this dispute shall not affect the Parties' duty to continue the performance of all of their non-disputed obligations.

**6.9.3** If any dispute arises, either Party shall give notice to the other Parties of the same, whereupon the Parties shall meet promptly and in a good faith to attempt to reach an amicable settlement.

**6.9.4** All disputes not settled amicably pursuant to Article 6.8.3 above shall be heard by the High Courts of Odisha.

**IN WITNESS WHEREOF**, each Party has duly executed this Agreement in four (4) originals on the date set out on the first page hereof.

*[Signature]*  
5/10

*[Signature]*  
05/10



**Schedule 7.**  
**Form of Direct Agreement**

*[To be filled in after the award of the winning offer, prior to the execution of the Contract]*

*Please note that this form of direct agreement may not be appropriate for all types of financing arrangements and the Parties will need to review and amend this document in light of the Contractor's financing arrangements.*

This direct agreement (the "Agreement") is made on [●], 201[●], by and between:

1. **Bhubaneswar Municipal Corporation** (the "BMC");
2. [.....] (the "Agent" for the Lenders); and
3. **Super Wealth Financial Enterprises Private Limited** (the "Contractor")

**WHEREAS**

- A. BMC and the Contractor have entered into an energy performance contract (the "EPC") on [●], under which the Contractor undertakes the implementation of energy conservation measures, installation of feeder panels for automation and metering, and shall operate and maintain at least seventy per cent (70%) of the street lighting fixtures surveyed and certified by the third party energy audit within the Project Area (as defined in the EPC).
- B. The Lenders have entered into an agreement for the provision of financing from the Lenders to the Contractor on [●] in connection with the EPC.
- C. It is a requirement of the EPC that this Agreement will be entered into by the Parties hereto.

**IT IS AGREED AS FOLLOWS:**

**1. Definitions and Interpretation**

- 1.1 In this Agreement, any capitalised terms which are not otherwise defined in this Agreement shall have the meaning given to them in the EPC, and the following expressions shall have the following meanings:

**"Appointed Representative"** means a representative that has assumed the Contractor's rights under the EPC, such as:

- a) the Agent and/or any of the Lenders;
- b) a person directly or indirectly owned or controlled by the Agent and/or any of the Lenders; or
- c) any other person approved by BMC (such approval not to be unreasonably withheld or

*Signature*

*M*  
*05/10*

delayed).

**"Security Document"** means [●].

**"Step-In Date"** has the meaning given to it in Clause 4.1.

**"Step-In Period"** means the period from the Step-In Date up to and including the earlier of:

- a) the Step-Out Date;
- b) the date of any transfer under Clause 7 (Novation);
- c) the date of any termination for breach under Clause 5 (Step-In Period);
- d) the date of expiry of the EPC; and
- e) the date falling one year after the Step-In Date.

**"Step-In Undertaking"** means a written undertaking in the form set out at Annexure 1.

**"Step-Out Date"** means the date falling 40 days after the date of the notice given under Clause 6.

**"Substitute Contractor"** has the meaning given in Clause 7.1.

1.2 Save to the extent that the context or the express provisions of this Agreement otherwise require:

- a) heading and sub-headings are for each of reference only and shall not be taken into consideration in the interpretation or construction of this Agreement;
- b) all references to Clauses and Schedules are references to Clauses of and Schedules to this Agreement;
- c) all references to any agreement (including, without limitation, this Agreement), document or other instrument include (subject to all relevant approvals and any other provision of this Agreement expressly concerning such agreement, document or other instrument) a reference to that agreement, document or instrument as amended, supplemented, substituted, novated or assigned;
- d) the words "herein", "hereto" and "hereunder" refer to this Agreement as a whole and not to the particular Clause, Schedule, part, section, paragraph, annex or appendix in which such word may be used;
- e) references to "Parties" mean the parties to this Agreement and references to a "Party" mean one of the parties to this Agreement.

## 2. CONSENT TO SECURITY

2.1 The Contractor hereby gives notice to BMC that the Contractor has granted *[insert details of security interest]* as set out in the Security Document.

2.2 BMC acknowledges notice of, and consents to, the security interest granted over the Contractor's rights under the EPC in favour of the Lenders under the Security Document.

*dmv 5/10*

*05/10*

- 2.3 BMC confirms that it has not received notice of any other security interest granted over the Contractor's rights under the EPC.

### 3. NO TERMINATION WITHOUT NOTICE

BMC shall not terminate or give notice of termination of the EPC, save in the circumstances set out in Clause 2 of the EPC, without giving to the Agent at least sixty (60) days of prior written notice stating the Contractor Event of Default (as described in Clause 27.3 of the EPC). This notice shall also contain details of all amounts due and payable by the Contractor to BMC and any other existing liabilities or unperformed obligations by the Contractor under the EPC.

### 4. APPOINTED REPRESENTATIVE

- 4.1 Without prejudice to the Agent's rights under the Security Document, at any time during the notice period mentioned in Clause 3 above, the Agent may give BMC seven (7) days prior notice of the date when an Appointed Representative shall assume, subject to Clause 4.2, jointly and severally with the Contractor, all of the Contractor's rights under the EPC (the "Step-In Date").

- 4.2 The Lenders shall provide BMC a Step-In Undertaking prior to the Step-In Date.

### 5. STEP-IN PERIOD

- 5.1 Without prejudice to Clause 3, but subject to Clause 5.2 below, BMC shall not terminate the EPC during the Step-In Period on grounds that the Lenders or their Agent have taken any action referred to in Clause 4 or enforced any Security Document.

- 5.2 BMC shall deal with the Appointed Representative and not the Contractor during the Step-In Period.

### 6. STEP-OUT AND END OF STEP-IN PERIOD

- 6.1 The Agent shall give BMC a prior written notice of the Step-Out Date.

- 6.2 On the Step-Out Date, subject to Clause 6.3:

- a) the Appointed Representative will be released from all of its obligations and liabilities to BMC under the EPC arising prior to the Step-Out Date and the rights of the Appointed Representative against BMC will be cancelled; and
- b) the Lenders shall be released from the Step-In Undertaking.

- 6.3 The releases between BMC, the Appointed Representative and the Lenders under Clause 6.2 above shall be subject to the obligation of the Lenders to pay any sums accrued before the end of the Step-In Period and to perform and discharge any obligations or liabilities under the Step-In Undertaking which have arisen before the end of the Step-In Period.

- 6.4 The Contractor shall continue to be bound by the terms of the EPC notwithstanding the occurrence of the Step-Out Date.

### 7. NOVATION

- 7.1 Subject to Clause 7.2, at any time during the Step-In Period the Agent may give prior written notice to BMC and any Appointed Representative proposing to procure the transfer by way of novation of the Contractor's rights and obligations under the EPC to another person (the

Am 5\*

B  
05/10



**"Substitute Contractor").**

- 7.2 The Agent shall not be entitled to implement a proposal under Clause 7.1 unless BMC consents to such proposal in writing. BMC shall notify the Agent as to whether it consents to the proposal or not.
- 7.3 The Agent shall, as soon as practicable, supply BMC with such information as BMC reasonably requires, to enable it to decide whether to grant its consent to a proposal pursuant to Clause 7.1.
- 7.4 BMC may withhold its consent to a proposed novation if it believes that the Substitute Contractor does not have the same technical experience or capacities as the Contractor, or *[may be completed later by the Parties as appropriate]*.
- 7.6 On any novation referred to in Clause 7.1 becoming effective:
- a) the Contractor shall be released from any obligations arising under or in connection with the EPC from that date and the Substitute Contractor shall become liable for obligations arising on or after that date;
  - b) BMC shall enter into a direct agreement with the Agent lending to the Substitute Contractor on substantially the same terms as this Agreement;
  - c) any subsisting grounds for termination of the EPC by BMC shall be deemed to have no effect in respect of the period prior to the novation becoming effective; and
  - d) any subsisting termination notice shall be automatically revoked.

**8. MISCELLANEOUS**

- 8.1 BMC shall, at the Contractor's expense, take whatever action the Agent or Appointed Representative may require for perfecting the novation under Clause 7 including the execution of any transfer or assignment, and the giving of any notice, order or direction and the making of any registration.
- 8.2 This Agreement shall remain in effect until earlier of the expiry of the Term of the EPC or the date on which all amounts which may be due by the Contractor to the Lenders under the financing agreements have been irrevocably paid in full.
- 8.3 The Agent shall notify BMC of the date referred to in Clause 8.2 above on or before its occurrence.
- 8.4 The Contractor joins in this Agreement to acknowledge and consent to the arrangements set out herein and agrees not knowingly to do or omit to do anything that may prevent any party from enforcing its rights under this Agreement.
- 8.5 For the avoidance of doubt, if there is any conflict or inconsistency between the provisions of this Agreement and the EPC, the provisions of this Agreement shall prevail.

**9. NOTICES**

- 9.1 Any notice shall be duly given if signed by or on behalf of a duly authorised officer of the person giving the notice and left at or sent by registered post or by facsimile or email transmission to the following addresses:

[•]

*for 5/10*

*for 05/10*

---

**10. ASSIGNMENT**

- 10.1 No party to this Agreement may assign or transfer any part of its rights or obligations under this Agreement, save that:
- a) the Agent may assign or transfer its rights and obligations under this Agreement to a successor agent in accordance without the consent of BMC;
  - b) the Lenders may assign or transfer their rights under the financing agreements in accordance with the terms of the financing agreements.
- 10.2 If paragraph 10.1(a) applies then BMC shall enter into a direct agreement with the new Agent on substantially the same terms as this Agreement.

**11. GOVERNING LAW**

- 11.1 This Agreement shall be governed by and construed in all respects in accordance with the laws of India and the laws of the State of Odisha.
- 11.2 The Parties agree to submit to the exclusive jurisdiction of the High Courts of Bhubaneswar any dispute or matter arising out of or in relation to this Agreement.

**IN WITNESS WHEREOF** the Parties have affixed their seals the day and date first hereinbefore written.

dm  
5/12

05/10

---

ANNEXURE 1 TO SCHEDULE 7 – FORM OF DIRECT AGREEMENT  
STEP-IN-UNDERTAKING

From: The Lenders  
To: BMC

We refer to the Direct Agreement dated [●] between BMC, [the Agent] on behalf of the Lenders and the Contractor (the "**Direct Agreement**").

We hereby undertake:

1. to pay BMC within thirty (30) days of demand by BMC any sum due and payable by but unpaid by the Contractor to BMC under the EPC prior to the date of issue of this Step-In Undertaking;
2. to pay to BMC, in accordance with the terms of the EPC, any sum which becomes due and payable by the Contractor under the EPC during the Step-In Period; and
3. to procure the performance and discharge, in accordance with the terms of the EPC, of any and all obligations and liabilities of the Contractor under the EPC which have arisen and have not been performed or discharged by the Contractor prior to the date of this Step-In Undertaking and any and all obligations and liabilities of the Contractor under the EPC which arise during the Step-In Period.

This Step-In Undertaking constitutes our unconditional and irrevocable undertaking to BMC subject to the terms of the Direct Agreement and may not be withdrawn, varied or revoked other than in accordance with the Direct Agreement.

dm  
5/1x

05/10



**Schedule 8.**  
**Form of State Support Agreement**

This state support agreement (the "Agreement") is entered into by and between:

1. **The Housing and Urban Development Department of the Government of Odisha**, represented by [●], duly authorized for the purposes of this Agreement,  
  
hereinafter referred to as "**HUD**"; and
2. **Super Wealth Financial Enterprises Private Limited**, a company duly registered in India as per the Companies Act of 1956, as amended from time to time, located at [●] and its representative being [●], duly authorized,  
  
hereinafter referred to as "**ESCO**".

HUD and ESCO are hereinafter individually referred to as a "**Party**" and collectively referred to as the "**Parties**".

**WHEREAS:**

- (A) The Bhubaneswar Municipal Corporation ("**BMC**") and ESCO entered into an energy performance contract (the "**EPC**") on [●], under which ESCO agreed to undertake the implementation of energy conservation measures, installation of feeder panels for automation and metering, and to operate and maintain at least seventy per cent (70%) of the street lighting fixtures surveyed and certified by the Third Party Energy Audit within the Project Area (the "**Project**").
- (B) Article 17.2 of the EPC provides that HUD shall secure the proper and timely performance by BMC of its payment obligations under the EPC.
- (C) Words and expressions beginning with a capital letter and not defined in this Agreement shall have the meaning given to them under the EPC.

**1. TERM**

This Agreement shall come into force on the date of execution by the Parties of this Agreement and shall remain valid until the expiry of the Term of the EPC. This Agreement can be terminated by either Party in writing with a two (2) month notice.

**2. PAYMENT OBLIGATION**

- 2.1 Pursuant to the terms and conditions hereof, HUD shall pay ESCO for any outstanding amounts, including any interest arrears as per the provisions of the EPC, under the invoices submitted by ESCO to BMC and not paid by BMC within hundred and twenty (120) days of the date of issuance of such invoice (including sixty (60) days of cure period specified under the EPC), provided that the outstanding amount to be paid is not disputed by BMC.
- 2.2 In the event BMC has not paid an undisputed outstanding amount within hundred and twenty (120) days of the date of issuance of the invoice by ESCO, ESCO shall be entitled to send a notice to HUD with a copy of the pending invoice along with supporting documentation requesting HUD to pay such outstanding amount. ESCO shall send a copy of such notice to BMC.

*Signature*

*Signature*  
05/10

2.3 HUD shall have thirty (30) days following the receipt of the notice to pay the requested amount. Following the payment by HUD of the outstanding amounts under the invoice, HUD shall have the right to require BMC to reimburse any amount paid to ESCO, along with interest at a rate of one point twenty-five per cent (1.25%) per month from the date of payment made to ESCO.

### 3. DISPUTE RESOLUTION PROCEDURE

3.1 This Agreement shall be governed by and construed in accordance with the laws of India and the State of Odisha.

3.2 Any dispute arising between the Parties with respect to this Agreement shall be resolved exclusively by the competent courts in Bhubaneswar.

### 4. ASSIGNMENT

The Parties may not assign by agreement or otherwise all or any portion of their rights, obligations or liabilities under this Agreement, without the prior written consent of all the other Parties.

### 5. NOTICES

All notices, requests, demands or other communications under this Agreement shall be in writing, in the English language, and will be either transmitted (i) personally, (ii) by fax, or (iii) by registered mail, to the addresses specified hereafter:

HUD: [ ● ]

ESCO: [ ● ]

BMC: [ ● ]

### 6. WAIVER OF SOVEREIGN IMMUNITY

HUD as a Government entity irrevocably waives, both in respect of itself and its assets, its rights to claim sovereign immunity (in any jurisdiction whatsoever), including but not limited to immunity from jurisdiction, enforcement, injunctions, or other provisional or protective measures and all other legal proceedings and relief.

IN WITNESS WHEREOF, the Agreement is signed on [ ● ], in four (4) originals and drafted in the English language.

*Am*  
5/1x

*Dr*  
05/10