## **OPERATION & MAINTENANCE**

This aim of public lighting should permit users of the road to move about with greatest possible safety and comfort so that the traffic capacity of the road at night is as much equal to that planned for the daytime as possible.

During Operation & Maintenance period of One (1) year, the Bidder shall supply of all man-power, spares and tools required for smooth and trouble free operation of the street light system.

The spares supplied shall be of similar technical specifications and data and shall be procured from the original manufacturer of Equipment, Lighting Fixtures and other associated Items. All metallurgical scrap of used spares will be handed over to BUIDCo as and when the spares are replaced. The metallurgical scrap will be given back to the contractor after replacement with the new part.

It is essential to the proper functioning of a public lighting installation that it should be properly maintained. Certain maintenance activities, aimed at keeping the effectiveness of the installation at the highest possible level are economically justified, so that the heavy investment in public lighting installation should continue to provide a good return. Because in a poorly maintained installation the power consumption is to a large extent wasted.

The Contractor shall provide list of all tools and tackles, which shall be required for proper operation and maintenance of LED Lighting System for One (1) year.

The Bidder shall have to submit the following documents along with the BID for O&M of the proposed Lighting Scheme

- List of Man-Power to be employed at site.
- List of recommended Spares to be maintained at site.
- List of Tools & Tackles to be maintained at site.
- Methodology.

## Maintenance of a lighting installation should embrace

- > Replacement of defective and missing lamps and accessories.
- Systematic replacement of lamps having a reduced efficiency, that is, those lamps that have come to the end of their useful service life.
- Cleaning of luminaries and lamps. The soiling of the luminaries depends very much on local conditions, the presence of industries in the area and the prevailing direction of the winds, etc.
- ➤ Maintenance of cables and columns: Inspection of main earthling arrangements, gaskets, the tracing of defects and broken lamps, and control of switching equipment.
- > Mounting height and angle of tilt should be maintained for desired light levels.
- Proper clearance should be maintained between carriageway and the light pole to avoid accidents and for safety.
- Set guidelines while allowing permission to set up brightly hoardings on roadways to avoid any accidents due to glare due to hoardings.
- > Proper and sufficient lighting should be provided for pedestrian crossing area.
- Care should be taken so that fuse carriers are provided in proper enclosures. Similarly fuses of appropriate rating should be used so that uninterrupted lighting is available during night time to ensure safety and security.
- Trimming of trees can be taken up to ensure good lighting is available, if trees are obstructing the light levels on the street.