

2025-02

DARK SKY LIGHTING PROJECT

Issue Date: 12/5/2024 Pre-Bid Meeting: 12/18/2024 2:00 MST Questions Deadline: 12/19/2024 2:00pm MST Response Deadline: 12/30/2024 2:00pm MST Bid Opening (at Village Office): 1/2/2025 2:00 MST

CONTANCT INFORMATION

Heather Gutierrez Village Procurement Officer 80 Jemez Springs Plaza Jemez Springs, NM 87025 (575) 829-3540 voffice@jemezsprings-nm.gov **Bid Notice on IFB 2025-02:** The Village of Jemez Springs is seeking qualified companies to supply and install Dark Sky Compliant LED Street Lights on a total of 29 Jemez Mountain Electric Cooperative (JMEC) owned poles. These lights will be replaced by the existing fixtures which will be returned to JMEC. Lighting shall meet all specifications within this bid.

GENERAL CONDITIONS

- 1. Materials Unless otherwise stated, all materials shall be new and both workmanship and materials shall be of good quality
- 2. Performance of Contract the vendor shall comply with this bid, all laws, ordinances, rules, regulations and specifications that have a bearing on this contract.
- 3. Delivery and estimated completion date bidder shall supply within their response the date of estimated delivery of lighting and date project is to be completed.
- 4. Warranties the bidder shall warrant and guarantee all workmanship performed by the bidder and materials supplied by the bidder for a minimum period of one (1) year from purchase date, unless otherwise specified in the specifications.
- 5. Default in the event of default by the contractor, the Village reserves the right to procure the commodities and/or service from other sources and hold the contractor liable for any excess cost occasioned thereby.
- 6. Firm Pricing bid price shall remain firm for the entire contract period.
- 7. Cancellation the Village may cancel the contract with the vendor at any time for vendor non-performance or vendor breach of contract. Cancellation shall not release the vendor from legal remedies available to the Village.
- 8. Reservation of Rights the Village reserves the right to reject any or all bids failing to meet the Village's specifications or requirements and to waive technicalities.
- 9. Submission of Bids bids shall be submitted at the time and place indicated in the invitation for bid. Bids shall be accepted by physical delivery to the Village office. Bids submitted shall be in opaque sealed envelope, addressed to the Village of Jemez Springs, marked with bid number, project title and bid opening date. If forwarded by mail, the sealed envelope containing the bid may be enclosed in another envelope addressed to the Village of Jemez Springs at the address stated in the invitation for bid. The Village reserves the right to accept or reject any or all bids. Bids received after the date and time in the invitation for bid will be returned to sender unopened. Be advised the Village is not in an area of guaranteed morning delivery.
- 10. Award award will be made to the most responsive, responsible and qualified vendor with the bid most closely conforming to solicitation, whose selection will be most advantageous to the Village. The bid which offers all specifications requested and has the least overall cost to the Village will be considered.

DARK SKY LUMINAIRE SPECIFICATIONS

1. LED Luminaire Requirements

- a. The LED luminaire MUST be Dark-Sky Certified and listed on the Darksky International website.
- b. LED luminaires marketed and presented as "dark-sky friendly", "dark-sky compatible" or similar marketing phrases are not allowed for this project.
- c. The LED conversion luminaire must be designed to replace or convert existing, 70W, 150W, 200W and 250W roadway, post top and decorative fixtures.
- d. Mogul or Edison-based LED lamps are not be allowed for this project.
- e. The power consumption for the LED conversion luminaire shall not exceed:
 - 25W for fixtures rated at 70W (system wattage)
 - 55W for fixtures rated at 150W (system wattage)
 - 70W for fixtures rated at 200W (system wattage)
 - 90W for fixtures rated at 250W (system wattage)
- f. The stand-by power draw of the LED conversion luminaire shall not exceed 2.50 W.
- g. The LED conversion luminaire shall be able to operate in an ambient temperature range of -20° Celsius to 50° Celsius.
- h. The LED conversion luminaire shall have a full ten-year warranty.
- i. The maximum correlated color temperature shall not exceed 2000K.
- j. The LED luminaire shall have a minimum system efficacy of 120 lumens per watt. A LM-79 report by an independent photometric testing facility will be required.
- k. The LED luminaire shall deliver a minimum lumen output of:
 - 3000 lumens for 25W LED conversion luminaires (system wattage) A LM-79 report by an independent photometric testing facility will be required.
 - 6600 lumens for 55W LED conversion luminaires (system wattage) A LM-79 report by an independent photometric testing facility will be required.
 - 8400 lumens for 70W LED conversion luminaires (system wattage) A LM-79 report by an independent photometric testing facility will be required.
 - 10,800 lumens for 90W LED conversion luminaires (system wattage) A LM-79 report by an independent photometric testing facility will be required.
- A minimum L-70 light depreciation value of 80,000 hours is required. All L-70 data will be calculated utilizing: (A.) LED manufacturer LM-80 report, (B.) ISTMT test report by an independent photometric testing facility, and (C.) Department of Energy (DOE) TM-21 calculated test results.
- m. Data utilizing TM-21 projected test data will not be considered.
- n. Independent 24 hour 104F (40C) thermal testing shall be performed. The parameters include thermal measurements at the LED Tc junction and the LED power supply. Thermal measurements shall not exceed LED and power supply rated maximum values.

- All LED luminaires will have a light distribution pattern in accordance with IESNA Type II,
 III, IV an V. An LM-79 report by an independent photometric testing facility will be required.
- p. The IESNA BUG luminaire classification for 25W LED conversion luminaires is not to exceed TM-15: B2 U0 G2. A LM-79 report by an independent photometric testing facility will be required.
- q. The IESNA BUG luminaire classification for 55W LED conversion luminaires is not to exceed TM-15: B2 U0 G2. A LM-79 report by an independent photometric testing facility will be required.
- r. The IESNA BUG luminaire classification for 90W LED conversion luminaires is not to exceed TM-15: B2 U0 G2. A LM-79 report by an independent photometric testing facility will be required.
- s. The LED conversion luminaires shall have a minimum rating of IP66.

2. Material Requirements

- a. The LED luminaire shall be primarily made of metal.
- b. The LED luminaire shall have a finish that is rust-resistant and powder coated.
- c. The lens shall be clear, optical grade silicone with an IESNA light distribution rating of II, III, IV, or V. Plastic or glass lenses will not be allowed for this project.
- d. LED lenses shall be mounted internally within the fixture housing. Any luminaire with lenses that either descend through or are mounted externally to the base of the fixture are not allowed for this project.
- e. The LED luminaire shall be fully internally shielded in such a manner that light emitted by the fixture, either directly from the lamp or indirectly from the luminaire, is only projected below the horizontal plane.
- f. External shield(s) or reflector(s) are not allowed.
- g. Driver shall be mounted internally and field replaceable.
- h. All screws shall be stainless steel.
- i. All components that require periodic maintenance will require captive screws.
- j. The minimum rating for ingress protection shall be IP66.

3. Power Supply Requirements

- a. The minimum power factor of the power supply will be 0.90 or greater.
- b. The power supply shall have a maximum Total Harmonic Distortion (THD) of less than 20% at full input power and specified voltage range and shall conform to ANSI C82.77-2002.
- c. At an ambient temperature of 25° C, maximum rating DC forward current shall not exceed 80% of the mA rating of the complete LED assembly in order to achieve specified light output requirements. Independent documentation required.
- d. The design of the driver and LED arrays shall include multi-current operation, with factory selectable ratings for each class of LED luminaire.

- e. The operating temperature of the power supply shall be between -20°C and 50°C.
- f. The power supply will be mounted as low as possible in the fixture. The power supply will not be mounted in the direct thermal path of, or directly over, the LED heat sink(s).
- g. The power supply must drive the LEDs with no perceived flashing or flickering.
- h. Transient protection will be per IEEE C.62.41-2-2002, Class A operation. Line transient protection rating shall be 20 kV or greater for both common mode and differential mode. It should also meet the test procedure described in IEE C62.45.
- i. Power supplies shall meet consumer emission limits as described in FCC 47 CFR Part 15/18.
- j. The power supply shall have a Class A sound rating per ANSI Standard C63.4 and a minimum rating of IP66.

4. Thermal Management Requirements

- a. The thermal management system of the LED luminaire shall be passive in nature and not incorporate any mechanical means of forced cooling such as fans, pumps, or liquids of any kind.
- b. An electronic control that limits maximum forward current is required to prevent thermal damage of the LED's
- c. The thermal management system shall be resistant to debris buildup and not degrade thermal dissipation performance.
- d. Fixtures utilizing external heat sinks as the primary means of thermal management are required. Any design that utilizes LED circuit boards mounted directly to metal plates/panels will not be considered for this project
- e. The thermal management system shall maintain the LED temperature equivalent to the manufacturer's rated specifications. LED manufacturer LM-80 report, ISTMT test report by an independent photometric testing facility, and DOE TM-21 calculations are required.

BID LINES

Total
_Total

Person completing this response represents that I am either authorized to bind the bidder, or that I am submitting the response on behalf of and at the direction of the bidder's representative authorized to contractually bind the bidder. I represent that the bidder or its applicable representative(s) has reviewed the information contained in this bid package and that the information submitted is accurate.