
REQUEST FOR BID
Underground Diesel Generator
South Dakota Science and Technology Authority
SDSTA Purchase Order # 26622
November 26, 2024

The South Dakota Science and Technology Authority (SDSTA) is seeking bids for (brief description of the service sought) at the Sanford Underground Research Facility (SURF). Documents included in this Request for Bid include:

- A. This Request for Bid
- B. SURF Underground Access Technical Specifications
- C. Draft Purchase Order

1.0 Background

SDSTA is a quasi-governmental agency established by the State of South Dakota to operate and manage SURF at the former Homestake Gold mine in Lead, SD. This facility has been rehabilitated and developed to support a variety of scientific experiments, including physics, biology, geology, and others.

SDSTA has a need for a portable diesel generator for underground use. Various project activities require powering of ventilation fans in work areas where permanent power is not available, thus requiring the use of a diesel-powered generator. Additionally, work areas are in older legacy drifts and raises with small cross-sections which limits the size of equipment that can access work zones. The existing equipment owned by SURF that is used for these services is either aging or undersized to power the 50 HP ventilation fans envisioned for work areas on the 3950L and 4700L UG levels.

2.0 Scope

SDSTA desires to acquire a portable diesel generator with self-contained, dual-wall fuel tank. The unit is to be sized to fit in the smaller drifts/areas of the facility and be capable of being reasonably fit onto rail cars for transportation inside either the Ross or Yates Cages. Refer to the SURF Underground Access Technical Specification document provided for reference to cage dimension/load limits.

The general scope of work for this Purchase Order will include the following:

- 2.1 Equipment Specifications:
 - 2.1.1 Engine 4 Cycle Diesel Tier 3 or higher
 - 2.1.2 Frequency – 60 Hz
 - 2.1.3 3 Phase Power Rating – Between 65 – 75 KVA
 - 2.1.4 Fuel Consumption – Less than 5 Gallons per Hour

2.2 Emissions Requirements:

- 2.2.1 Nox + HC – 4.33 (g/kW-hr)
- 2.2.2 CO – 1.15 (g/kW-hr)
- 2.2.3 PM – 0.18 (g/kW-hr)
- 2.2.4 480V at 90 amps must be provided

2.3 Dimensions Must Meet or be Smaller than Listed Below:

- 2.3.1 Length – 78 Inches
- 2.3.2 Width – 45 Inches
- 2.3.3 Height – 50 Inches
- 2.3.4 Dry Weight – 2,300 Pounds

3.0 SDSTA Additional Requirements

- 3.1 A 1-year warranty is desired, the vendor to provide alternative for consideration.
- 3.2 If purchased, the SDSTA desires the equipment to be fully serviced, load tested and shipped to site for staging to go underground via the Ross Cage dimension restrictions/capacities.

4.0 Schedule

The activities noted in the Scope section above should commence following the purchase being ordered. The schedule for completion of this project is negotiable and flexible to accommodate the vendor’s availability. The proposed schedule for the project is:

RFB Posted.....	11/26/24
RFB Responses Due.....	01/02/25
Purchase Order Issued By (Target)	01/24/25

5.0 Bid Elements

- 5.1 Written exceptions to RFB and/or product specifications
- 5.2 Shipping costs
- 5.3 Total bid cost
- 5.4 Estimated delivery schedule
- 5.5 Warranty information

6.0 Bid Requirements

- 6.1 Proposers should submit an electronic copy (.pdf format) of the bid to:

Shelly Nisly
SD Science and Technology Authority
630 East Summit Street
Lead, SD 57754
mnisly@sanfordlab.org

- 6.2 Questions must be sent in writing by email to Shelly Nisly (mnisly@sanfordlab.org). Answers will be emailed to all prospective proposers and posted to the sanfordlab.org website.
- 6.3 The bid period may be extended at the discretion of the SDSTA based on the quantity and/or complexity of questions. Any notices of extension of time to respond will be distributed to all prospective proposers.
- 6.4 All communications regarding this procurement between RFB release and purchase order being issued shall be directed to Shelly Nisly. Communications with other SDSTA staff regarding this procurement in advance of the purchase order being issued are not allowed.

7.0 Selection Process

The SDSTA will review all submitted bids for adherence to this request’s requirements and capabilities and select the firm providing the Lowest Cost – Technically Acceptable bid.

Revision History

Rev	Date	Section	Paragraph	Summary of Change	Authorized by
01	5/17/2022	NA	NA	Initial issue	CCR 573
02	12/1/2022	NA	NA	Change document number from OC to COM	CCR 655