INVITATION FOR BIDS
OFFICE OF PROCUREMENT & CONTRACTS

1. **INSTRUCTIONS FOR BIDDERS**

   a. Sealed bids will be received in the Office of Procurement & Contracts, Mississippi State University, for the purchase of the items listed herein.

   b. All bids must be received in the Office of Procurement & Contracts on or before the bid opening time and date listed herein. Delivery of bids must be during normal working hours, 8:00 a.m. to 5:00 p.m. CST, except on weekends and holidays when no delivery is possible.

   c. Bidders shall submit their bids in a sealed envelope.
      i. Sealed bids should include the bid number on the face of the envelope as well as the bidders' name and address. Bids should be sent to: 245 Barr Avenue, 610 McArthur Hall, Mississippi State, MS 39762.

   d. All questions regarding this bid should be directed to the Office of Procurement & Contracts at 662-325-2550.

2. **TERMS AND CONDITIONS**

   a. All bids should be bid "FOB Destination"

   b. Bidders must comply with all rules, regulations, and statutes relating to purchasing in the State of Mississippi, in addition to the requirements on this form. General Bid Terms and Conditions can be found here: https://www.procurement.msstate.edu/procurement/bids/Bid_General_Terms_May_2019_V2.pdf

   c. Any contract resulting from this Invitation for Bid shall be in substantial compliance with Mississippi State University's Standard Contract Addendum: https://www.procurement.msstate.edu/contracts/standardaddendum.pdf

ITS Bid Number: 25-15
Opening Date: February 27, 2025 at 2:00 p.m.
Description: CEPH Storage Cluster

Vendor Name: _____

Vendor Address: _____

Telephone Number: _____

Days the Offer is Firm: _____

Authorized Signature: _____

Name: _____

Title: _____

Item	Quantity	Description	Unit Price	Total Price
1		CEPH Storage Cluster		

Bagley College of Engineering request bids for a CEPH (open-source software-defined storage platform) data storage system providing storage to a ProxMox cluster. All equipment is intended to be used as a single system and must work together accordingly and integrate into existing ProxMox cluster system. Partial bids will not be accepted. Minimum components to be provided include:

- Qty. 4 - CEPH cluster node
  - Two (2) 250GB SATA 2.5" SSD boot hard drives.
  - 256GB DDR4 RAM.
  - AMD EPYC 7543 CPU processor with 32 cores (64 threads).
  - LSI 9305 HBA
  - Redundant power supplies.
  - Two (2) 2-port 10Gb/s SFP+ network cards.
  - Qty. 10 – Micron PRO5400 7.6TB SSD
  - Qty. 9 – Seagate Exos 16TB HDD
  - Qty. 3 – Micron PRO5400 960GB SSD
- Qty. 1 – Service plan
- Qty. 1 – 3 year hardware warranty

General:

- CEPH cluster configuration.

- The configuration must include integration into the college's ProxMox environment.
- 7.6TB drives must be configured for 101TB of usable storage with 3x replication.
- 16TB drives must be configured for 384TB of usable storage with 4+2 configuration.
- 960GB drives must be configured for journaling and CEPH database metadata.

Warranty/Maintenance/Support:

- all items must be new; no refurbished or used equipment is allowed.
- all items must include original manufacturer's warranty
- warranty for overall system, individual components, and all included hardware and software shall be no less than the defined support time frame of 3 years.
- all components shall have a minimum 3 year warranty.
- all solid state storage drives must be warranted against wear for the full 3 years
- option to extend all maintenance/support past warranty period on a per year basis
- maintenance/support of CEPH environment must include future hardware purchases even if hardware is not purchased from originating vendor
- warranty shall start upon completion of installation, start-up, and acceptance

Physical/Environmental:

- all components must be rack mountable in one 48U standard EIA 19 rack
- all components shall be air cooled utilizing room air at an average of 78 degrees Fahrenheit
- air flow shall be front of rack to back of rack
- all powered components must support 208 volt power input.

Shipping/Delivery/Installation:

- all shipping/delivery/installation costs shall be included
- power cables, rack mount kits, cable management arms, etc… must be included
- MSU will provide rack for mounting all hardware
- MSU will provide all network hardware and cables for connecting storage into existing TCP/IP networks.

Vendor Credentials:

- vendors should have credible experience with CEPH data storage for large scale storage systems
- vendor must provide up to three references upon request of customers using these or similar products of the manufacturer.

Acceptance Criteria:

- successfully integrating into existing ProxMox environment
- successfully accessing data from ProxMox based VMs