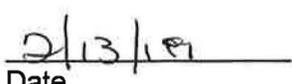


AMENDMENT NUMBER 4 TO SOLICITATION NUMBER 511017

ISSUED BY: Triad National Security, LLC (TRIAD) Los Alamos National Laboratory PO Box 1663, MS D447 Los Alamos, NM 87545	TRIAD SUBCONTRACT ADMINISTRATOR: Maureen Armijo Telephone No.: 505-665-2098 Fax No.: 505-665-8944 Email Address: m_armjo@lanl.gov
PROJECT NAME: Crossroads Supercomputer	
CURRENT PROPOSAL / BID DUE DATE: 3/18/2019	REVISED PROPOSAL / BID DUE DATE: N/A
DESCRIPTION OF CHANGES: Amendment 4 is written to answer the following questions: 1. Question 1: With respect to Section 3.5.9 of Exhibit D, it states: The Offeror shall report, or project, the time to perform the following collective operations for 25%, 50%, and 100% of the compute partition nodes in the system and report on core occupancy during the operations measured by the communication benchmark specified on the Crossroads website for: <ul style="list-style-type: none"> • An 8 byte MPI_Allreduce operation. • An 8 byte per rank MPI_Allgather operation. <p>The MPI source on the benchmark site does not appear to have such collectives. Will the Crossroads Project team be updating the tarball or will the Offeror be allowed to use something else?</p> <p>Answer 1: The Offeror is being asked to project the time required for the collective calls listed. The projected time provided in the response can be demonstrated using any benchmark selected by the Offeror, but the APIs to start the call must be compliant with the MPI standard and be reproducible. Any source code used must be supplied during acceptance.</p>	
<p>Failure to acknowledge this amendment, formerly called an addendum, in accordance with the Instructions to Offerors or Solicitation Provisions may result in rejection of your proposal / bid. Except as provided herein, all terms and conditions of the Request For Proposal / Solicitation, as heretofore changed, remain unchanged and in full force and effect.</p>	
ISSUED ON BEHALF OF TRIAD BY: <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  Subcontract Administrator </div> <div style="text-align: center;">  Date </div> </div>	

RECEIPT ACKNOWLEDGED BY:

Signature & Title

Date

Company Name