July 19, 2012

Dear John,

The San Diego Supercomputer wishes to participate in the XSEDE Federation and Service Provider Forum as a Level 1 Service Provider (SP) through its delivery of the Gordon high-performance computing resource (OCI 0910847).

Gordon is a 1,024 node, Appro-integrated Sandy Bridge cluster with three unique architectural features that make it suited for emerging classes of problems in data intensive computing: 1) 300 TB of high performance flash memory; 2) large memory SMP "supernodes" that provide 2 TB of cache coherent memory per node; and 3) a high performance parallel file system with measured rates of 100 GB/s and a capacity of over 4 PB. Gordon passed its acceptance test on February 24, 2012, and went into production on March 5, 2012.

There are significant benefits of having Gordon as a Level 1 SP. While the NSF has mandated that Gordon be available through the XSEDE program, we see many new opportunities in this relationship beyond the pure delivery of compute cycles. Some of these include: 1) As a first-of-its kind system, Gordon provides researchers the opportunity to explore data intensive computing challenges. Important domains include economics, genomics, and numerous informatics disciplines where the analysis of large amounts of data have heretofore been hampered by the absence of enabling technologies like those in Gordon; 2) it allows XSEDE and SDSC to explore some of the opportunities and challenges in recruiting new communities to high performance computing; and 3) it provides an important feedback mechanism for future efforts that XSEDE, its partners, and the NSF may undertake in data intensive computing.

We have reviewed the *XD Service Providers Forum: Charter, Membership, and Governance* document (version 10.1, dated 2 February 2012, at: https://www.xsede.org/documents/10157/281380/SPF_Definition_v10.1_120228.pdf3) defining the mutual responsibilities of XSEDE and an SP and are confident that we can and will fulfill our obligations as described therein. In the event that you have an issue with our performance, please contact me directly. Similarly, if we perceive an issue, we will contact you. In either case we commit to work with you to resolve any issues. We at the San Diego Supercomputer Center look forward to working with XSEDE to advance the mission of XSEDE and the NSF in advancing the nation's research capability.

Sincerely,

Michael L. Norman
Director, San Diego Supercomputer Center, UCSD