STATEMENT OF CONSIDERATIONS

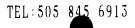
ADVANCE WAIVER OF THE GOVERNMENT'S U.S. AND FOREIGN PATENT RIGHTS AND ADVANCE APPROVAL TO ASSERT COPYRIGHT RIGHTS UNDER SUBCONTACT B548850 ISSUED BY LAWRENCE LIVERMORE NATIONAL LABORATORY TO INTERNATIONAL BUSINESS MACHINES CORPORATION FOR THE BLUEGENE/P DESIGN ARCHITECTURE, PHASE II -DESIGN AND FABRICATION; DOE WAIVER NO. W(A)-05-014

The Petitioner, International Business Machines Corporation (IBM), has requested an Advance Waiver of the Government's Intellectual Property Rights in the above-cited research and development subcontract for the BlueGene/P Design Architecture, Phase II (Design and Fabrication) (hereinafter BlueGene/P Phase II). In its request, IBM has agreed to accept the same terms and conditions that were incorporated in previous LLNL Subcontract B542702 for the BlueGene/P Design Architecture, Phase I (Feasibility Study)(hereinafter BlueGene/P Phase I) and which were authorized under DOE Advanced Waiver W(A)-04-053. See Enclosures1 and 2, IBM's facsimile Request for Proposal No. B548850 and DOE Advance Waiver W(A)-04-053, respectively. These same terms and conditions were negotiated in previous LLNL Subcontract B517552 with IBM for the BlueGene/L Program and were authorized under DOE Advance Waiver W(A)-01-018 (SAN 688). See Enclosure 3, DOE Advance Waiver W(A)-01-018.

<u>Background</u>: The previous BlueGene/L Subcontract No. B517552 was the first initiated under the Advanced Simulation and Computing (ASC) Advanced Architecture Program. The program's objective is to identify inadequacies in today's high-end computing systems and to promote R&D efforts exploring alternative high performance computing architectures that will address the ASC program's complex applications. The BlueGene/P Program is for the development of a second generation system which builds on the first generation BlueGene/L design based on several proprietary hardware and software technologies. The leverage of these IBM technologies is expected to lead to a BlueGene/P design having significant improvement over BlueGene/L in cost performance. As in previous subcontracts under various aspects of the ASC program, IBM has expressed its reluctance to accept a subcontract award if a waiver of intellectual property rights is not granted.

The BlueGene/P Program contemplates three phases of research and development - the technology choice and architecture phase, the design and fabrication phase and the prototype hardware build-out phase. The first phase has been successfully completed and Subcontract B548850 is for BlueGene/P Phase II having a project budget of approximately \$1.1 M with a 40/60 IBM/DOE cost-sharing allocation. The next phase will be reviewed by the ASC program office for further funding consideration during FY 2006 when/if the R&D under this subcontract proves successful.

<u>Scope of the Waiver</u>: IBM has agreed to accept the same scope as in W(A)-04-053 (BlueGene P Phase I) and W(A)-01-018 (BlueGene/L). See Enclosures 2 and 3, page 2, Scope of Waiver.



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Briefly, the Petitioner will be able to retain the patent rights to its sole or joint (undivided) subject inventions in accordance with the terms and conditions set forth at 48 CFR 52.227-12 as amended by 10 CFR 784.12. DOE will retain a royalty-free, non-transferable, irrevocable, nonexclusive license to practice any subject invention by or on behalf of the U.S. Government anywhere in the world, march-in rights and a preference for United States Industry provision comparable to those set forth in 35 U.S.C. 202 and 204. IBM will conduct R&D activities under this subcontract principally (LOE>90%) in U.S -based facilities, and for a period of one year after the subcontract completion, subsequent R&D on subject technologies substantially (LOE>90%) in U.S.-based facilities. The agreed upon U.S. Competitiveness provision is made applicable to this subcontract. See Enclosure 4, U.S. Competitiveness Clause.

IBM is granted prior approval to establish copyright subsisting in all published and nonpublished data. DOE will retain a paid-up, nonexclusive, irrevocable worldwide license on behalf of the U.S. government in such copyrighted data to reproduce and prepare derivative works, and perform by or on behalf of the Government. In the case of computer software, after five (5) years from the date of production, this license will expand to include the right to distribute copies to the public, and perform publicly, and display publicly, by or on behalf of the Government.

<u>Conclusion</u>: Given the past progress of the ASC program with the present parties under the BlueGene/P Phase I subcontract and the applicability of the previously negotiated terms and conditions to this next stage of research and development, it is desirable to contine the proposed BlueGene/P Phase II effort under the same terms and conditions.

Accordingly, in view of the statutory purposes of DOE waiver policy, and the objectives of the Accelerated Strategic Computing program, and in view of the factors to be considered under DOE's statutory patent waiver policy, all of which have been considered, it is determined that this advance waiver will best serve the interest of the United States and the general public. It is therefore recommended that this waiver be granted.

William Daubenspeck Office of Counsel NNSA Service Center

Date: 05/18 (2005

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Based on the foregoing Statement of Considerations, it is determined that the interests of the United States and the general public will best be served by waiver of the United States' domestic and foreign patent rights, copyright in software and a delay in the release of technical data as set forth herein, and therefore, the waiver is granted. This waiver shall not apply to a modification or extension of the IBM subcontract where, through such modification or extension, the purpose, scope or DOE cost of the subcontract has been substantially altered. This waiver shall not affect any waiver previously granted.

CONCURRENCE:



Date: 6/13/05

Dimitri Kušnezov Director of Office of Advanced Simulation And Computing (NA-114)

APPROVED:



Assistant General Counsel for Technology Transfer and Intellectual Property (GC-62)

Encl. (4)

Datc: 6-21-0 *

Enclosure 4

48 CFR 52.227-12 PATENT RIGHTS-WAIVER with 10 CFR 784.12 (JAN 1997) (MODIFIED)

(t) U.S. Competitiveness

The Contractor agrees to conduct research and development activities under this Contract principally in U.S. - based facilities. "Principally" is defined as greater than a ninety (90%) percent level of effort. Contractor also agrees that for a period of one (1) year following Contract completion, subsequent research and development by the Contractor for the purpose of commercializing technologies arising from the intellectual property developed under this Contract shall be performed substantially in U.S. - based facilities. "Substantially" is defined as greater than a fifty (50%) percent level of effort. The Contractor further agrees that any processes and services, or improvements thereof, which shall arise from the intellectual property developed under this Contract when implemented outside the U.S., shall not result in a reduction of the Contractor's research workforce in the United States. Finally, it is understood by the Parties that any subsequent follow-on contracts and/or future phases of work under the Government's ASCI Program will be subject to a separate U.S. Competitiveness determination.