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Updated 07-10-08

SUBCONTRACT

NO. B563020



Lawrence Livermore National Laboratory
Supply Chain Management Department
P.O. Box 5012
Livermore, CA 94551

Subcontractor:

TBD

LLNS Contract Administrator:

Gary M. Ward
Phone: (925) 423-5952
Fax: (925) 423-8019
E-Mail: ward31@llnl.gov

Introduction

This is a Fixed Price Subcontract for the build, delivery, installation and integration with LLNL's storage area network (SAN) infrastructure, and maintenance of the Dawn and Sequoia Supercomputers, as further described herein.

The parties to this Subcontract are Lawrence Livermore National Security, LLC (hereinafter called "LLNS") and the party identified above as the "Subcontractor."

This is a Subcontract under Prime Contract No. DE-AC52-07NA27344 between LLNS and the United States Government (hereinafter called "Government"), represented by the Department of Energy National Nuclear Security Administration (hereinafter called "DOE/NNSA"), for the management and operation of the Lawrence Livermore National Laboratory (hereinafter called "LLNL") and the performance of certain research and development work.

Agreement

The parties agree to perform their respective obligations in accordance with the terms, conditions, and provisions of the attached SCHEDULE OF ARTICLES and any documents referenced or incorporated therein, which together with this Subcontract Signature Page shall collectively constitute the entire Subcontract and shall supersede all prior negotiations, representations, or agreements, whether verbal or written.

TBD

**LAWRENCE LIVERMORE
NATIONAL SECURITY, LLC**

BY: _____

BY: _____
Gary M. Ward

TITLE: _____

TITLE: Contract Administrator

LLNL Supply Chain Management
Department

DATE: _____

DATE: _____

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SCHEDULE OF ARTICLES FOR SUBCONTRACT NO. B563020

ARTICLE 1 – INCORPORATED DOCUMENTS

The following documents and forms are hereby incorporated as a part of this Schedule of Articles of the Subcontract and are referenced, or attached hereto.

Documents

GENERAL PROVISIONS FOR COMMERCIAL SUPPLIES AND SERVICES (GPs # 600B; 7/10/08)

STATEMENT OF WORK FOR DAWN (Date)

STATEMENT OF WORK FOR SEQUOIA (Date)

MILESTONE PAYMENT SCHEDULE (Date)

SITE SERVICES REQUIREMENTS (SSR ES&H LEVEL 0; 04/01/08) *

SECURITY AND SITE ACCESS PROVISIONS (S&SAP; 10/01/07) *

SMALL BUSINESS SUBCONTRACTING PLAN (Date)

- (Note: a Small Business Subcontracting Plan is required for any award made to a large business)

Forms

WORKPLACE SUBSTANCE ABUSE PROGRAM PLAN (WSAPP)

* The documents and forms marked with an asterisk are available on-line at the following website: <http://supplychain.llnl.gov/> (under Supplier Information, select either General Provisions & Forms, or Special Provisions).

In the event any attachments, specifications, drawings or other documents referenced or incorporated in this Subcontract reference “The Regents of the University of California”, “University”, or “U.C.”, all such references shall mean “Lawrence Livermore National Security, LLC” or “LLNS”, respectively.

ARTICLE 2 – SCOPE OF WORK

- A. The Subcontractor shall build, deliver, install and integrate with LLNL’s SAN infrastructure, and maintain the Dawn and Sequoia Supercomputers, as described in the Statement of Work (SOW).
- B. The Subcontractor shall furnish all personnel, supervision, materials, supplies, equipment, tools, facilities, transportation, testing, and other incidental items and services necessary for performance of the work, except for Government Property specified herein to be furnished by LLNS. The Subcontractor shall deliver the materials, products, supplies, reports and residuals, as specified.
- C. The work shall be performed by the Subcontractor at the Subcontractor's facility located at **TBD**, at the LLNL, and at other locations approved by LLNS.

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- D. LLNS may, at its option, by written unilateral modification to this Subcontract require additional items and related service as described in Article 7 – FIXED PRICE OPTIONS.

ARTICLE 3 – SAFETY-RELATED REQUIREMENTS

- A. **General.** The Subcontractor shall comply with all ES&H requirements, training, and associated safety documents referenced, attached, or incorporated to this Subcontract, including any incorporated safety related documents submitted by the Subcontractor and reviewed and accepted by LLNS. The Subcontractor shall also comply with, and assist LLNS and the DOE/NNSA in complying with, the safety and health requirements identified in, or applicable to, this Subcontract.
- B. **Safety Standards and Testing.** Materials, supplies, and equipment furnished or used by the Subcontractor under this Subcontract shall meet nationally recognized safety standards or be tested by the Subcontractor in a manner demonstrating they are safe for use. All electrical equipment, components, conductors, and other electrical material shall be of a type that is listed, labeled, or tested by a Nationally Recognized Testing Laboratory (NRTL) in accordance with Title 29, Part 1910, *Occupational Safety and Health Standards*, of the Code of Federal Regulations (29 CFR 1910). The Subcontractor shall notify the LLNS Contract Administrator and the LLNS Technical Representative, in writing, of any materials, supplies, or equipment to be furnished or used under this Subcontract that does not meet these requirements.

ARTICLE 4 - INJURY AND ILLNESS REPORTING

- A. The Subcontractor shall immediately notify the LLNL Emergency Dispatch Center, at 925-422-7595 (or by phone on site dial 911 or by cell phone on site dial 925-447-6880) of any work-related injury to or illness of Subcontractor or lower-tier subcontractor personnel working at any LLNL site that results in a fatality, immediate in-patient hospitalization or immediate scheduled admittance, or any single occurrence that results in days away from work for three or more personnel.
- B. The Subcontractor shall provide a report of all new recordable fatalities, injuries, and illnesses involving either Subcontractor or lower-tier subcontractor personnel working at LLNL sites. The report shall be submitted on DOE Form F 5484.3, *Individual Accident/Incident Report*, in lieu of OSHA Form 301, *Injury and Illness Incident Report*, within seven working days of a recordable work-related fatality, injury, or illness. DOE Form F 5484.3 is located at the following website: <http://www.directives.doe.gov/pdfs/forms/5484-3.pdf>. A recordable work-related injury or illness is one that results in a fatality, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, loss of consciousness, or diagnosis of a significant injury or illness by a physician or other licensed health care professional (29 CFR 1904). This requirement to report recordable work-related injuries or illnesses includes all the requirements for recordable incidents as described in 29 CFR 1904. Privacy cases should be noted so appropriate steps can be taken to protect the privacy of injured personnel (29 CFR 1904.29).

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- C. The reports shall be sent to the LLNL Environmental, Safety, Health and Quality Office, Attention: Occupational Injury-Illness Records Manager, L-510, 7000 East Avenue, Livermore, CA 94550.
- D. The Subcontractor shall allow LLNS access to and review of the following:
1. Subcontractor's logs and summaries of all recordable occupational injuries and illnesses (OSHA No. 300 and 300A Forms or State Equivalent) maintained by the Subcontractor.
 2. Subcontractor's injury or illness prevention plans and written Injury and Illness Prevention Program (IIPP) established, or which are required by law to be established.
- E. These requirements are in addition to, and do not replace, the Subcontractor's injury and illness reporting or record-keeping obligations under other applicable regulations.

ARTICLE 5 – PERIOD OF PERFORMANCE

A. Baseline

The work described in ARTICLE 2 - SCOPE OF WORK shall be completed in accordance with the Milestone Payment Schedule incorporated herein. The completion date of this Subcontract shall be **TBD**.

B. Options

The period of performance shall automatically be extended by the exercising of any or all of options of this Subcontract, as described in ARTICLE 2 – SCOPE OF WORK and ARTICLE 7 – FIXED PRICE OPTIONS. Option exercise shall be at the sole discretion of LLNS. Such modification shall be subject to all provisions of this Subcontract.

ARTICLE 6 – PRICE AND PAYMENT

A. Fixed Price

The Subcontractor shall perform this Subcontract for the total fixed price of **\$TBD**.

The fixed price stated above does not include and LLNS shall not be charged for any state sales & use tax. LLNS holds California State Resale Permit No. SR-CH 100-978248.

B. Allocated Funding Limit

Full funding is not presently available for this Subcontract. The total funding amount currently allocated for payments under this Subcontract (the “allocated funding limit”) is **\$TBD**. The allocated funding limit shall cover performance of specific milestones of the Milestone Payment Schedule, identified as follows.

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Dawn Milestones Authorized for Performance

TBD

Sequoia Milestones Authorized for Performance

TBD

It is anticipated that LLNS will periodically increase the allocated funding limit, subject to annual appropriated funding from Congress. The allocated funding limit may only be changed by a written unilateral modification to this Subcontract issued by the LLNS Contract Administrator, or a designee.

C. Limitation of LLNS' Liability

LLNS' obligation for payment hereunder is expressly limited to the allocated funding limit of this Subcontract, any other provision to the contrary notwithstanding. In no event shall LLNS' liability to the Subcontractor hereunder exceed the allocated funding limit of this Subcontract. The Subcontractor is not obligated to perform work or otherwise continue performance beyond the milestones specifically authorized for performance and identified in Paragraph B, above.

D. Work Authorization

LLNS will use a phased approach to authorizing work under this Subcontract. The Subcontractor is only authorized and obligated to perform work for specific milestones, which are identified in Paragraph B, above. It is anticipated that LLNS will periodically authorize additional milestones for performance, subject to annual appropriated funding from Congress and progress achieved by the Subcontractor. LLNS will authorize additional milestones for performance under this Subcontract by a written unilateral modification to this Subcontract issued by LLNS Contract Administrator, or a designee.

E. Invoices and Milestone Payments

The Subcontractor shall submit its invoice in PDF format via email, providing a detailed statement of the milestone(s) achieved. The Subcontractor shall submit its invoice upon completion of the milestone(s) to the LLNS Contract Administrator at the following address.

ward31@llnl.gov

LLNS will verify completion of each milestone. Title to deliverable items or deliverable portions thereof shall vest in the Government immediately upon the date of the milestone payment.

F. Payment Terms

The terms of payment will be 30 days after receipt of a proper invoice. Payment amounts shall be less any applicable adjustments, credits, offsets, or tax withholds. Payment on an invoice shall not constitute final acceptance of the related performance.

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ARTICLE 7 – FIXED PRICE OPTIONS

- A. LLNS and the Subcontractor agree to fixed price options in this Subcontract, as follow.

Option No.	Milestone No.	Option Milestone Description	Completion Date	Payment Amount
TBD	TBD	TBD	TBD	\$ TBD
	TBD	TBD	TBD	\$ TBD
		TOTAL OPTION FIXED PRICE		\$ TBD

The total fixed price of this Subcontract with options is \$TBD.

- B. LLNS may exercise options on or before the following dates.

Option No.	Option Expiration Date
TBD	TBD

ARTICLE 8 – SHIPPING INSTRUCTIONS

- A. Shipping Address. All shipments shall be sent to the following address.

Lawrence Livermore National Laboratory
For the DOE/NNSA
Subcontract No. B563020
7000 East Avenue
Livermore, CA 94550

- B. F.O.B. Point. All shipments shall be shipped F.O.B. Destination.
- C. Shipping Instructions. All shipments to LLNS shall be shipped by Subcontractor's vehicles or licensed common carriers selected by the Subcontractor.
- D. Shipping Charges. Shipping charges shall be for the account of the Subcontractor.

ARTICLE 9 – COORDINATION AND ADMINISTRATION

- A. The LLNS Contract Administrator for this Subcontract is Gary Ward, or designee. All matters relating to the administration, performance and non-technical interpretation of this Subcontract shall be directed to the LLNS Contract Administrator. The Subcontractor shall direct all notices and requests for approval to the LLNS Contract Administrator. The LLNS Contract Administrator will issue any notices or non-technical approvals to the Subcontractor.
- B. The LLNS Technical Representative for this Subcontract is Mark Seager, or designee. The LLNS Technical Representative will provide technical direction in connection with the work to

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be performed under this Subcontract. The term “technical direction” is defined to include (1) direction to the Subcontractor which assist in the interpretation of drawings, specifications, or technical portions of the work description; and (2) the review and approval of technical reports, drawings, specifications, and information to be delivered by the Subcontractor under the Subcontract, where required. The LLNS Technical Representative will issue all technical direction in writing.

- C. The LLNS Technical Representative is not authorized to issue any technical direction which would (1) constitute an assignment of work outside the general scope of the work covered by this Subcontract; (2) change the description of the work to be performed or any applicable drawings, designs, and specifications; (3) change the time or place of performance; the method of shipment or packaging, or the place of inspection, delivery or acceptance; (4) increase the estimated cost for performance of the work or the time required for performance of the work; (5) change any expressed term or condition of the Subcontract; or (6) unreasonably interfere with the Subcontractor’s ability to perform and complete the work. Any such change must first be authorized by a written modification to this Subcontract issued by the LLNS Contract Administrator.

ARTICLE 10 – REPORTS

A. Type of Reports

The Subcontractor shall prepare and submit reports as described in the SOWs. The Subcontractor shall not submit classified reports to LLNL under this Subcontract.

B. Distribution of Reports

The Subcontractor shall distribute reports electronically to the LLNS Technical Representative at the following email address.

seager1@llnl.gov

With the exception of an authorized representative of DOE/NNSA and those indicated above, the Subcontractor shall not distribute reports of work under this Subcontract to any individual or organization without the prior written approval of the LLNS Contract Administrator.

C. Interim Reports

It is understood that there will be other information exchanged between the parties from time to time. The data may be exchanged directly between the parties concerned; formal reporting and distribution is not required in these cases.

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ARTICLE 11 – PROPERTY

- A. The Subcontractor shall acquire, and/or LLNS will furnish to the Subcontractor, the materials, equipment, supplies, and/or tangible personal property items identified below, for use under this Subcontract:

Subcontractor Acquired Property

None.

LLNS Furnished Government Property

None.

- B. All property acquired by the Subcontractor and/or furnished by LLNS shall be identified, utilized, accounted for, and dispositioned in accordance with the clause of the GENERAL PROVISIONS entitled *GOVERNMENT PROPERTY*. Disposition directions and authorization will be provided by the LLNS Contract Administrator or a LLNS Property Representative.
- C. All property acquired by the Subcontractor or furnished by LLNS under this Subcontract shall be used only for performing this Subcontract and shall not be utilized after the completion, expiration or termination of this Subcontract, for any reason, unless otherwise provided in this Subcontract or approved by the LLNS Contract Administrator or a LLNS Property Representative.

ARTICLE 12 – APPROVAL OF TECHNICAL DATA

If this Subcontract requires the Subcontractor to furnish any drawings, specifications, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance or test data, or other technical data for approval by LLNS prior to Subcontractor performance, the approval of the data by LLNS shall not relieve the Subcontractor from responsibility for any errors or omissions in such data or from responsibility for complying with the requirements of this Subcontract, except as specified below. Any work done prior to such approval shall be at the Subcontractor's risk.

If the data includes any variations from the Subcontract requirements, the Subcontractor shall describe such variations in writing at the time of submission of the data. If LLNS approves any such variation(s), a change order to the Subcontract shall be issued by LLNS and, if appropriate, a bilateral modification to the Subcontract shall be negotiated.

ARTICLE 13 – ACCESS TO LLNL COMPUTER RESOURCES

- A. The performance of this Subcontract may require Subcontractor personnel (including lower-tier subcontractor personnel) to use or connect with LLNL computer resources (i.e., computers or computer networks). Any such access and use shall comply with Department of Energy Acquisition Regulation (DEAR) 952.204-77, *Computer Security* (AUG 2006) which is hereby incorporated by reference into this Subcontract; and shall be in accordance with and subject to

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LLNL Cyber Security Program (LLNL CSP) requirements, including the following:

1. Approval to access specific LLNL computer resources shall be obtained from the appropriate LLNL Information Systems Security Officer (ISSO), through the LLNS Technical Representative.
 2. Access to LLNL computer resources by Subcontractor personnel is only permitted as required to perform the work authorized under this Subcontract. Classified computer resources or information shall not be accessed or attempted to be accessed without specific written authorization from the LLNL CSP. Personal and non-work-related use of LLNL computer resources by Subcontractor personnel is prohibited.
 3. Only Subcontractor personnel who are U.S. citizens may access or use LLNL computer resources, unless specific written authorization is granted for each non-U.S. citizen by the LLNL CSP.
 4. Only the approved Open Terminal Server (OTS) modem pool method shall be used to access unclassified LLNL resources via modems. All unclassified computer systems with modems other than facsimile machines must be configured with auto-answer turned off. Modems are prohibited on classified systems.
 5. All software used by Subcontractor personnel on LLNL computer resources must be appropriately acquired and used according to the applicable licensing agreements.
 6. All information or data furnished by LLNS or obtained from or developed on a LLNL computer resource by Subcontractor personnel shall be treated as confidential and protected by the Subcontractor to prevent disclosure to any persons other than those authorized by LLNS.
 7. Computer passwords used by Subcontractor personnel for LLNL computer resources shall comply with the applicable rules and be protected to prevent disclosure to other persons. If a computer password is disclosed, or disclosure is suspected, the Subcontractor shall immediately notify the LLNS Technical Representative and arrange for replacement of the password.
 8. The use at the LLNL of any non-LLNL computing or video conferencing equipment with electronic data transfer capabilities (e.g., personal computers, including portables, laptops, electronic notebooks, personal digital assistants, and handhelds) may not be connected to or used to communicate with any LLNL computer resources without the written approval of the LLNS Technical Representative and the LLNL CSP.
- B. These requirements shall be applicable whether such access is at the LLNL, at the Subcontractor's facility, or elsewhere; and shall be applicable to lower-tier subcontractors and their personnel whose work requires access to LLNL computer resources. The Subcontractor shall report any suspected or actual computer security incident as soon as possible to the appropriate ISSO or, if the ISSO is not available, then directly to the LLNL CSP.

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- C. LLNS may monitor the use of LLNL computer resources by network operating software, reviewing the contents of all LLNL computer resources and any computers used to access LLNL computer resources, and other appropriate means.
- D. If the Subcontractor does not comply with the provisions of this article, LLNS may withdraw the Subcontractor's access to LLNL computer resources. Misuse of LLNL computer resources may be a violation of law and could result in appropriate action, including termination for default and/or criminal prosecution.

ARTICLE 14 - DEBARMENT ELIGIBILITY CERTIFICATION

By acceptance of this Subcontract, the Subcontractor certifies, to the best of its knowledge and belief, it and its principals are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts (including subcontracts) by any agency of the Federal Government.

ARTICLE 15 – SPECIFIC TERMS AND CONDITIONS FOR SEQUOIA

The provisions of this Article are only applicable to the Subcontractor's work related to Sequoia. The provisions of this Article do not apply to the Subcontractor's work related to Dawn. The provisions of this Subcontract that are not Dawn- or Sequoia-specific shall apply equally to the Subcontractor's work on both Dawn and Sequoia.

- A. Sequoia GO/NO-GO Decision
 - 1. Sequoia is described in the Sequoia SOW. The Subcontractor shall install and integrate Sequoia with LLNL's SAN infrastructure to comprise the Sequoia System.
 - 2. Upon completion of Sequoia SOW Section 8.3.9 "Sequoia Prototype Review" of the Sequoia SOW, the Subcontractor and LLNS shall consider three major decision points.
 - a. The results of the Subcontractor's work on research and development Subcontract B571534 for Sequoia will form the basis for a GO/NO-GO decision to build Sequoia.
 - b. A GO decision will require the Subcontractor and LLNS to revise the Sequoia SOW by written modification of this Subcontract. See Paragraphs B, C, and D, below and Section X of the Sequoia SOW.
 - c. A commitment by LLNS and the Subcontractor to acquire parts for Sequoia after review and approval by the LLNS and DOE/NNSA.

If all three decisions are affirmative, LLNS will amend this Subcontract to reflect the terms and conditions agreed upon in connection with the decision to build Sequoia.

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3. LLNS may authorize the Subcontractor, in writing, to acquire the parts necessary to build Sequoia, provided the GO/NO-GO decision above is GO and after the Subcontractor has notified LLNS it is ready to acquire the Sequoia parts. Sequoia parts include, but are not limited to, individual Sequoia processor and interconnect ASICs, memory chips or DIMMs, PCBs, optical component cables, empty racks, cooling equipment, power supplies, fans, and fully or partially integrated built racks of parts. The express written approval of the LLNS Contract Administrator is required before the Subcontractor is permitted to acquire the Sequoia parts.
4. LLNS and the Subcontractor agree to share the memory price risk for the Sequoia system. In exchange for this memory price risk sharing, the Subcontractor agrees to disclose actual memory cost information (i.e., the sum of the actual cost the Subcontractor will pay its supplier for memory and the Subcontractor's overhead recovery charges) to LLNS prior to purchasing Sequoia system memory parts. The fixed price of this Subcontract is based on a total of TBD TibiBytes (TiB) of DDR3 SDRAM for Sequoia at the total estimated price of \$TBD, or \$TBD per GibiByte (GiB). If the actual memory price is more than 5% above or below this estimate when the SDRAM needs to be purchased to build Sequoia, the parties agree to negotiate a mutually acceptable memory price estimate and either change the total fixed price of this Subcontract accordingly or change the Sequoia system deliverables accordingly. If LLNS obtains substantive information indicating the Subcontractor's memory pricing may not represent a fair and reasonable market price, LLNS will share this information with the Subcontractor. If LLNS and the Subcontractor cannot agree on an equitable change to the Subcontract, LLNS may elect, by written notice to the Subcontractor within 14 days, to purchase the SDRAM itself and furnish it to the Subcontractor.

B. Sequoia SOW Target Requirements

LLNS and the Subcontractor recognize that the production and performance of Sequoia will be tied directly to the results of the Subcontractor's work on research and development Subcontract B571534 for the Sequoia architecture. Since research results are not predictable, and since the actual performance of future products cannot be defined in the present, the Sequoia SOW defines the requirements for the Subcontractor's performance in terms of targets. These targets are not the usual mandatory (minimum or maximum) requirements that are typically used in an SOW. Targets are those performance achievements that LLNS and the Subcontractor reasonably believe the Subcontractor could approach, achieve, or exceed, depending upon the results of the research.

C. Sequoia SOW Performance Assessment

LLNS and the Subcontractor agree that the Subcontractor's performance under the Sequoia SOW will be measured by an aggregate assessment of the level of achievement of the system as a whole rather than an assessment of performance of each target requirement individually. LLNS will assess the Subcontractor's performance on the system as a whole after the Subcontractor completes work on the critical subsystems and provides performance results to LLNS. At its discretion, LLNS may use a numeric or subjective assessment method depending upon the nature

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of the target requirement being assessed. Credits and debits will be reasonably assigned by LLNS in proportion to the level of achievement relative to the target requirement. LLNS will give assessment credits if the performance results exceed the target requirement, will give a neutral assessment if the target is merely met, or will give assessment debits if the performance results do not meet the target. LLNS will then aggregate the individual assessments into an overall assessment, balancing the credits and debits in a reasonable manner. These critical subsystem and overall system assessments, along with the individual assessments, will be promptly and continually shared with the Subcontractor.

Since LLNS has agreed to use a Sequoia SOW with target requirements rather than traditional performance requirements, LLNS is accepting some of the risk normally assumed by a subcontractor under a fixed price subcontract. As consideration for accepting this increased level of risk, the Subcontractor agrees that LLNS shall have the sole discretion to assess the Subcontractor's performance relative to each target requirement, the critical subsystems identified in the Sequoia SOW, and the system as a whole. This does not, however, infringe upon the Subcontractor's rights under the clause in the GENERAL PROVISIONS entitled *DISPUTES*.

D. Sequoia SOW Conversion from Target Requirements to Traditional Requirements

LLNS and the Subcontractor agree that certain target requirements in the Sequoia SOW will be converted to traditional mandatory requirements after Dawn acceptance is complete and the results of research and development Subcontract B571534 for the Sequoia architecture become available. These conversions shall be defined by the mutual agreement of LLNS and the Subcontractor and implemented by a written modification of this Subcontract.

E. Source Code

The Subcontractor shall deliver source code for software delivered with Sequoia, which may include the ability of LLNS to build software binaries that reproduce Subcontractor delivered binaries that can be installed on Sequoia, as mutually agreed upon by the parties. The source code shall allow LLNS to assist the Subcontractor in performing software maintenance of the Sequoia System.

F. Obligations of the Parties

LLNS and the Subcontractor agree that this Subcontract involves the development of cutting-edge technology under aggressive schedules. LLNS and the Subcontractor agree (i) that the Subcontractor shall use reasonable efforts to deliver in accordance with the requirements and schedules set forth in this Subcontract, and (ii) to reasonably consider limitations that may occur in meeting obligations under this Subcontract. If the Subcontractor is unable to meet its performance obligations, then LLNS and the Subcontractor hereby agree to negotiate the Sequoia Statement of Work and the Subcontract price, if necessary, to reflect changes to the Subcontractor's performance obligations. LLNS and the Subcontractor agree to use this process to address performance issues before resorting to any rights or remedies available by way of the *DISPUTES* or the *TERMINATION* clauses of the GENERAL PROVISIONS.

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G. Sequoia Unwind

1. The technical checkpoints identified within Sequoia SOW Paragraph TBD shall be used to review technical progress and schedules, which may be revised. Within 15 days after completion of a technical checkpoint, either party may decide to cancel its participation in the Sequoia work by providing written notice of its decision to the other party. If no such written notice is received by either party, then the Subcontractor's obligation to proceed hereunder shall continue. Cancellation under this Paragraph shall not constitute a termination for default or convenience but, rather, a voluntary cancellation of the obligations of the Sequoia work. In the event either party elects to invoke the cancellation right prescribed by this Paragraph, LLNS shall have no obligation to pay for milestones it has not accepted, and the Subcontractor shall have no obligation either to perform work prescribed by any remaining milestones and their associated Sequoia SOW sections, or to make any payments to LLNS.
2. If exercised, the foregoing cancellation right shall constitute the parties' exclusive remedy and shall be subject to the following limitation. In the event of cancellation by LLNS after the Subcontractor has acquired the Sequoia parts, LLNS shall pay the Subcontractor for the Sequoia parts and the Subcontractor shall provide LLNS with reasonable documentation supporting the cost of the Sequoia parts and shall also deliver to LLNS any Sequoia parts not already delivered to LLNS under the Sequoia SOW. LLNS and the Subcontractor agree that LLNS' obligation to pay for the Sequoia parts hereunder shall not exceed \$TBD. In the event of cancellation by the Subcontractor after the Subcontractor has acquired the Sequoia parts, LLNS' sole and exclusive obligation for payment hereunder is expressly limited to milestones it has accepted. In this event, LLNS and the Subcontractor shall mutually agree upon return of any deliverables not accepted by LLNS or delivery of Sequoia parts to LLNS in proportion to the payments made by LLNS for completed Sequoia milestones.

ARTICLE 16 - EXPORT CONTROL REQUIREMENTS

- A. Deliverable items under this Subcontract are subject to export control under applicable U.S. laws and regulations. The Subcontractor shall ensure they are not exported under this Subcontract.
- B. An export, under U.S. export control laws and regulations, is any:
 1. Shipment, transfer, or transmission out of the United States, by any means (including hand-carrying), of any commodity (equipment, hardware, or materiel) technology (technical data, information, or assistance), or software (commercial as well as custom).

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2. Transfer to any person or entity of a commodity, technology, or software, by physical, electronic, oral, or visual means, with the knowledge or intent the item(s) will be shipped, transferred, or transmitted to a non-U.S. entity or individual.
3. Disclosure of technical data or information to a foreign entity or individual, by any means, inside or outside of the United States. This includes interactions with foreign persons visiting or on assignment to LLNL or while LLNS personnel are on foreign travel.
4. Transfer of a commodity, technology, or software, by any means, to a foreign embassy or affiliate.

ARTICLE 17 – GENERAL PROVISIONS

- A. The clauses incorporated by reference in the attached GENERAL PROVISIONS shall be applicable to this Subcontract based on the value of the Subcontract, the status of the Subcontractor, and the nature and location of the work as indicated in the GENERAL PROVISIONS. As used therein, the term “Seller” shall mean “Subcontractor,” and the terms “Purchase Order” and “PO” shall mean “Subcontract.”
- B. This Subcontract shall involve access to or the generation of classified information or access to “limited” or “exclusion” security areas. Accordingly, the clauses listed in the GENERAL PROVISIONS related to such work shall apply.

(END OF SCHEDULE OF ARTICLES)