

**NOAA'S R&D HPCS ACQUISITION  
SOLICITATION NUMBER DG1330-05-RP-1038  
QUESTIONS AND ANSWERS  
AMENDMENT 0015**

**Question 445:** In Question 444, the Government required that all media be robotically mounted. Given the budget considerations, is this still a requirement for Workstreams 7-9.

Answer: Given the reduction of the budget associated with Workstreams 7-9, the Government will allow for shelving of tapes that are not accessed in a year or more. This is specified in amendment 14.

Note that current usage patterns indicate that approximately 1/2 of the tapes that were created over a year ago are accessed within the current year.

**Question 446:** We request an extension to the due date.

Answer: The Government has moved the proposal due date to January 30, 2006 at Noon EST. The soft copy (PDF) is due on January 30, 2006 at Noon EST. The hard copies are due on February 2, 2006 at Noon EST. (The hard copies must be IDENTICAL to the soft copies delivered earlier.) All materials should be delivered to the Contracting Officer.

**Question 447:** For planning purposes, what is the anticipated award date for the HPCS acquisition?

Answer: The Government expects to make award at the end of April, 2006.

**Question 448:** PROPRIETARY

**Question 449:** During earlier discussions, the government had approved early access (in FY06) to facilities for site preparation. Is early access (in FY06) still permissible for site preparation?

Answer: Section C.5.6.1, p. 40 provides the completion date for Phase I site preparation at Goddard (October 1, 2006); C.11 Appendix B, p. 73 provides the availability dates for installation at BLDR-1 (January 1, 2008) & BLDR-2 (July 18, 2006) and for PRTN (July 1, 2006). Installation of equipment may begin on those dates at the vendor's risk. If the Contractor requires additional site preparation to the real property at a site, those modifications may begin only if Government funding is available at the time of construction. At this time, the Government does not know how much funding will be available in FY 2006 for contractor-required site preparation.

NOTE: The cost of all contractor-required site preparation is charged against the funds provided under the contract, whether performed by the Contractor or the Government. In the event the Government makes contractor-required modifications in FY 2006, the cost of those modifications will be recovered through withholding from the Contractor's payments. The reduction in FY 2007 payments to reflect these FY2006 costs shall be amortized in equal amounts over a six-month period commencing in October 2006.

**Question 450:** With the firm storage, security, network, and software requirements outlined in the RFP, a reduction in funding results in a direct impact to the amount of compute capabilities that can be offered. In essence, the new amendment (14) reduces the funds available for compute since the requirements for all other components have not changed and compute performance is the only floating variable. 1) Can the government reassess the HSMS requirements at GFDL or the availability of GFE components and thereby reduce the impact of the funding reduction on the compute systems?

2) Can the government reassess the HSMS requirements for WS4-9 and provide a coupled estimate of storage requirements to SLT performance and thereby ease the impact of reduced funding on the compute system?

Answer: For workstreams 1-3, the HSMS requirements are specified as a function of computational capability. Also note, Amendment 14, section C.12, also provides 512x300GB hard drives.

The funding profile for workstreams 4-6 has not changed significantly, however the HSMS benchmark has been changed to be more realistic. Note that much of the data archived on the HSMS associated with workstreams 4-6 comes from the production system and is not directly related to computational capability of the RDHPCS.

The funding profile for workstreams 7-9 has been cut in the base period by over 25%. Amendment 14 Sections C and J significantly reduce the HSMS requirements for these workstreams. Much of the data stored on the HSMS associated with workstreams 7-9 is acquired data and its quantity is not directly proportional to the computational capability of the RDHPCS. It should be noted that in question 445, tapes not accessed in over a year can be shelved. It should also be noted that amendment 14 does not require an HSMS for workstreams 7-9 to be delivered until the second year of the contract.

**Question 451:** Given the status of this procurement, the extensive rework and associated cost to accommodate the changed conditions of the procurement, as well as the fact that it appears that it will be later in GFY06 before a final source selection decision is made, we suggest that the government consider making a down-select to two final offerors. A down-select would be a potential win-win to (1) reduce the government's administrative time and cost in proposal evaluations; and (2) reduce the substantial/potential financial burden on the competing contractors. A down-select could be made based on submissions made on October 2005 so that offeror(s) not in the competitive range will be able to dedicate limited resources toward pursuing other business opportunities.

Will the government consider making a down-select for this phase of the acquisition?

Answer: The government reconsidered the competitive range prior to releasing the latest amendment to the RFP. All vendors asked to respond to the RFP are considered to be competitive and have a realistic chance of winning the contract.

**Question 452:** Given that the Base Contract Period commences on October 1, 2006 (Section B.2, L1.6.1) and that acceptance testing cannot begin until that same date, and yet the

installation of equipment can begin at PRTN on July 1, 2006, and BLDR on July 18, 2006 (C.11.1), it appears the Contractor would be performing at risk during the period between July 2006 and October 2006. Can the Government clarify this time difference and the associated impact on schedule and payments?

Answer: See the response to 449.

**Question 453:** FSL Archive (Configuration)

Amendment 14 states that FY07 data for WS 7-9 will be archived in the existing Sun/ADIC HSMS (C.5.2.4, Page 10).

- a) Is the archive capability offered by the Government in FY07 a service; or is the Government offering this as GFE?
- b) If the capability is offered as a service, is the R&D HPCS Contractor responsible for any costs associated with this service (maintenance, supplies, media) during this period?
- c) If the capability is offered as a service, is the R&D HPCS Contractor responsible for administration and operation of the archive during this period?
- d) If the capability is offered as a service, is the R&D HPCS contractor responsible for any outages associated with the archive during this period, or would any system outages caused by archive problems be treated as null time?
- e) If the capability is offered as GFE with Government furnished maintenance, is the R&D HPCS Contractor responsible for administration, operations support, or performance implications of any LTO-1 to LTO-3 migration that might be taking place during FY07?

Answer: During FY07, the Government will maintain and administer the Sun/ADIC HSMS for WS 7-9 at its own expense. It is neither a service nor GFE with respect to the RDHPCS contract. The data on the Sun/ADIC HSMS will be accessible via NFS and/or SCP to the RDHPCS. New data produced by the RDHPCS will be stored to the Sun/ADIC HSMS via the same mechanisms.

It should be noted that the offeror is not obligated to provide an HSMS solution associated with WS 7-9 until the second year of the contract (FY08). The Sun/ADIC HSMS is available as GFE at the beginning of FY08.

**Question 454:** FSL Archive (Configuration)

Please clarify the site-constrained GFE list for Boulder for October 2007 (C.12, Page 102). Amendment 14 lists only 330 LTO-1 media, but notes that LTO-3 tape drives will be installed in FY06.

- a) Will the migration from LTO-1 to LTO-3 be completed before the archive is offered as GFE on October 1, 2007?
- b) What will the complete tape inventory be on October 1, 2007, including any tapes that may not be contained in the robotic archive silo?

Answer: a) The Government does not intend to migrate from LTO-1 media to LTO-3 media but rather run a hybrid system with both LTO-1 (legacy) and LTO-3 (new archived data) media in the system.

b) The Government expects to have approximately 410TB of data archived. The Government currently double-copies approximately half of its data associated with workstreams 7-9. As a

result this policy and a previous policy of double-copying all data the Government expects to have approximately 3200 LTO-1 tapes with few (if any) blank. The Government expects to have approximately 550 LTO-3 tapes with few blank. All LTO-3 tapes will be in the robot and approximately 1300 LTO-1 tapes will be in the robot.

**Question 455:** FSL Archive (Performance)

The Government specifies an archive benchmark for the initial configuration of the archive for Workstreams 7, 8, and 9 (J.1.4.4.4, Page 30).

- a) Does the Government intend for the Contractor to perform this archive benchmark on the GFE archive system?
- b) Does the Government warrant that the GFE archive system will satisfy the archive benchmark?
  - ii) If the performance of the GFE archive in FY07 limits the performance of the R&D HPCS system, how will the Government resolve the performance issue with respect to the SLT calculations?

Answer: i) a) The Contractor is not obligated to provide an HSMS solution for WS 7-9 until FY08 and thus need not meet the archive benchmark until then.

b) The Government believes the HSMS should be able to meet the HSMS benchmark for WS 7-9 with either the existing 8 LTO-1 drives or the anticipated hybrid solution of 3 LTO-3 drives and 7 LTO-1 drives. However, see the answer to (a) above.

ii) The SLT calculation for Workstreams 7-9 should be isolated from the HSMS solution the Government uses during FY07. It is understood that the SLT performance may be affected by other storage components that the offeror is responsible for.

Failures in the Government's HSMS for workstreams 7-9 during FY07 will not result in downtime if it affects the RDHPCS. For all workstreams 7-9 beginning in FY08 and all other workstreams beginning in FY07 downtime of the HSMS that result in the loss of productivity will result in downtime (and thus a loss of SLTs).

**Question 456:** Jet Systems (Configuration)

1. There are conflicting descriptions of the iJet system. Some references (e.g., <http://hpcs.fsl.noaa.gov>) describe iJet as a 768 node system. Section J1 (Page 18-19) of the RFP describes the iJet system as consisting of 1536 sockets but only 1528 processor cores. The Amendment 14 GFE list (C.12, Page 103) includes only 700 nodes being offered as GFE.

- a) What is the correct number of nodes, sockets, and cores being offered as GFE?
- b) Please describe the configuration and current function of any iJet nodes not be offered as GFE, and describe the functional and performance implications of removing these nodes from the cluster.
- c) Please describe the configuration and function of any special purpose nodes within the system (e.g., nodes with only one socket populated, with additional memory, or with special communications interfaces).

2. Section J1 (Page 19) of the RFP describes the eJet system as consisting of 296 sockets with two processor cores per socket (one socket per node populated with a dual core processor chip). Please clarify the node, socket, and core configuration of the eJet system.

3. Please provide complete information describing the current software configuration on eJet and iJet, including the version, patch level, and any local customization of the operating system and all third party software (Resource Management Software, Batch Queuing Software, Programming Environment Software, Commercial-Off-the-Shelf Software, and Community Supported Software).

Answer: 1) a) There are currently 768 nodes (1536) cores that compose the compute partition of the iJet system. iJet is not under maintenance and the Government anticipates at least 700 nodes will be functional at the beginning of FY07. (Thus, the offeror may assume at least 700 nodes are functional and available at the beginning of FY07.)

b) The only nodes not offered are ones that may not be functional at the end of FY06 (they will be available as spare parts).

c) iJet has two nodes with 4GB of memory and 8 nodes with 2GB of memory. All of the other compute nodes have 1GB. Users login into front-end nodes for compiling and job submission which have 2GB of memory but no MyriNet NICs. All iJet nodes have 40GB disk drives.

2) eJet has 304 computational nodes with 2GB of memory all with MyriNet NICs. There are an additional 11 nodes with MyriNet NICs 5 have 4GB of memory, 2 have 8GB of memory, and 4 have 16GB of memory. The 11 nodes are used for compiling, job submission, Unix "cron" jobs, serial pre- and post-processing, and running graphics codes. These 11 nodes are the only ones with disk drives in eJet (40GB drives).

3) Most of the software on eJet and iJet is open source with the exception of the Intel Compiler suites on each system. The compiler is licensed for only the front-ends on each system (4 on iJet and 3 on eJet). The batch system is SGE 6.0 for both systems with a custom (open source) wrapper for qsub. The OS for iJet is based upon Fedora Core 1 with kernel patches for Lustre and MyriNet. The kernel level is 2.4.26. The OS for eJet is based upon SUSE 9.1 with kernel patches for Lustre and MyriNet. The kernel level is 2.6.5.

**Question 457: Jet Systems (Performance)**

Please provide complete and current benchmarks for both eJet and iJet for each of Workstreams 7, 8, and 9 that are sufficient to meet the Government's RFP requirements for Throughput and Scaling Data per Section J of the RFP.

Answer: The Government is in the process of generating the scaling studies for workstreams 7-9 for both iJet and eJet. They will be available at:

<http://rdhpcs.noaa.gov/jetscaling.html>

Note that the information will be provided as available. The Government suggests that the above web page be checked frequently.

**Question 458: Jet Systems (Reliability)**

In order to assess the Offeror's ability to operate the Jet Systems at the required minimum level of 96% availability, please provide current and historical reliability and availability

information for eJet and iJet systems. At a minimum, please provide the history of all outages over the last twelve months, indicating the period of the outage, the root cause of the outage, and any metrics describing the scope of the outage (impact to system availability or lost production time).

Answer: The Government will be releasing Amendment 15 later this week. In Amendment 15 both eJet and iJet will be removed from the GFE list for FSL (Section C.12, pages 102-103).

**Question 459: Transition Plans**

Please clarify the Government's requirements regarding the submission of a Transition Plan thirty calendar days prior to all data migrations and major system changes (C.8.5.4, Page 51). Does the Government require the Contractor to submit a Transition Plan for each subsystem prior to starting work on the initial system deliveries? What is the anticipated Government's approval cycle for such documents?

Answer: Offerors are required to submit a Transition Plan for the initial system delivery as part of its proposal submission (See Section L, Tab 9.5.) Transition Plans for subsequent system deliveries are to be submitted in accordance with the procedures set forth in Section C.8.5. The 30-day period cited in Sections C.8.5.2, C.8.5.3, and C.8.5.4 are minimum periods and the contractor will be encouraged to submit appropriate Plans required by these Sections much earlier. The Government will review and provide comments within 5 working days from receipt of the Contractor submitted Plans.

**Question 460:** Does NOAA require the same number of hardcopies and CDs for the January 19, 2006 submission as was required/provided for the October 28, 2005 submission (see below)?

October 28, 2005 submission requirements:

Deliverables to Mr. Voitk are as follows:

- Three (3) originally executed SF33s
- One (1) original and two (2) hard copies of both versions of Technical Proposal
- Two (2) copies of Technical Proposal on CDROM
- One (1) original and five (5) copies of Business Proposal
- Four (4) copies of Business Proposal on CDROM
- One (1) original and four (4) hard copies Facilities Proposal
- Four (4) copies of Facilities Proposal on CDROM

Deliverables to Mr. Ron Bewtra are as follows:

- Ten (10) copies of both versions of Technical Proposal
- Two (2) copies of Business Proposal
- Two (2) copies of Facilities Proposal
- Three (3) copies of Technical Proposal on CDROM
- Two (2) copies of Business Proposal on CDROM
- Two (2) copies of Facilities Proposal on CDROM

Answer: The Contracting Officer's letter dated December 22, 2005, announcing the Government's re-opening of discussions also included guidance as to the number of copies required for each proposal (see second to last paragraph).

**Question 461:** In amendment 14 section C.10.1.3 the current LSC at GFDL has 2688 cores (processors). The throughput benchmark for ws1-3 described in J.1.4.2.4, Baseline Throughput Performance, uses 3240 cores (processors). WS1 has 8 copies with 135 cores=1080, ws2 has 6 copies using 240 cores= 1440 and ws3 has 4 copies with 180 cores= 720. This is 20.5% more processors than the LSC currently has. This leads to an inaccurate representation of the baseline performance. Please modify the required number of copies of each workstream and/or redefine the baseline performance so that only 2688 processors are used.

It would be most accurate if the processor counts used were such that all copies of the jobs could run simultaneously on the LSC system. The LSC system is described as: 3-512 processor systems, 4- 256 processor systems and 1- 128 processor system.

Answer: The Government has considered the possibility of updating the baseline for WS1-3. However, such an update would have to take into account the full information now available (i.e. actual core counts, current compiler performance, etc).

In deciding against a revision of the baseline, the Government considered the following:

1. The reasons for defining a baseline which fully utilizes the LSC supporting WS1-3 are detailed clearly in Q&A 364. (The derivation of the baseline for WS1-3 has been reviewed at length in Benchmark question 217 and RFP questions 292, 362 and 364.) The requirement for a baseline which fully utilizes all available cores remains unchanged.

2. It is true that the total core count assumed for development of the baseline is greater than the number of cores ultimately obtained through the upgrade process. On the other hand, the Government has seen substantial compiler related performance improvement in the benchmark codes at core counts of interest.

3. Any redefinition of the baseline must not selectively use information currently available. Rather, a new baseline must use all information currently available.

Therefore in light of points 1, 2 and 3 above as well as the efforts already expended and the role of the baseline as merely a "snapshot of performance at a point in time" (see Q&A 362), the Government will not modify the baseline or the required number of workstream copies.

**Question 462:** GFDL's HSMS is offered as GFE. Because the Government owns title to this equipment, we require that the Government provide the current monthly maintenance and software support costs associated with the SGI Origin 3800 server and related GFE (including monthly or annual HSMS and ACSLS software). Additionally, we require that the Government direct a designated Vendor contact to work directly with us to develop these costs through the intended period of use by the Vendor.

Answer: The SGI Origin 3800 server and related GFE (including monthly or annual HSMS and ACSLS software) are maintained by GFDL's current prime contractor, Raytheon. The detailed maintenance pricing of system components is not available to the Government. Offerors are encouraged to contact the OEM (SGI) directly to obtain this information.

In that it is possible to acquire maintenance from companies other than OEMs for this equipment, the Government does not endorse any particular supplier for maintenance.

**Question 463:** If any of the equipment described in Section C.10.1.3 or section C.10.2.3 will become GFE, we request that the Government disclose this and update Section C.12 Appendix C.

Answer: The Government has disclosed all GFE in C.12 Amendment 14.

**Question 464:** Section C.5.2.4 is amended to state that the Government does not require a new HSMS for workstreams 7-9 until 10/01/2007. It further states that files not accessed in one year may migrate out of a robotic unit to shelf storage. Will the Bidder be required to propose Vendor staff to mount and unmount tape cartridges from robotically managed storage to shelf storage and back or will the government provide operators to perform this task?

Answer: The vendor is not required to provide operators to mount vaulted tapes, the Government will do so (only for workstreams 7-9).

**Question 465:** GFDL has significantly upgraded its disk storage capacity over what was described in previous RFP Amendments. Did this storage upgrade occur after the last proposal submission of 10/28/2006? Is all of the recently acquired disk storage now being offered as GFE or is some amount of it leased? Would the Government please disclose all warranty, maintenance and support charges for the GFE disk storage.

Answer: The GFE'd portion of the new disks can be found in C.12 of Amendment 14.

The 512x400GB drives have a one-year factory warranty beginning 11/11/2005. Additionally, the disks are covered with 7X24X2 support through the current contract period ending 9/30/06.

For additional warranty, maintenance and support questions please contact SGI directly.

**Question 466:** Section C.11 of Amendment 14 offers components of the FSL Jet as GFE at the beginning of FY2007, except for the HSMS which is offered at the beginning of FY2008. In order to potentially make use of the JET GFE being offered by the Government, we require the following information:

1. We request the Government provide the current Monthly Maintenance and Software Support charges associated with the Jet GFE that is being offered by the Government (all system and software components requiring support).
2. We request a point of contact(s) with the Government's supplier of hardware maintenance and software support for the Jet GFE being offered unless the Government plans to hold and

extend current maintenance and support contracts through the Vendor's intended period of use.

3. Is the Bidder required to maintain a minimum of 96% availability on the Jet GFE through the period of intended use? If so, we require that the Government provide monthly Availability Reports for the GFE being offered from the time of its initial installation to the present time. If the methodology used to track monthly availability differs from that required by this procurement, we request that the Government describe the methodology used to calculate the Monthly Availability of the system.
4. If Bidders are allowed to claim SLT credit for the JET GFE being offered by FSL, we require FSL to provide a full set of scaling results for each of the Workstreams similar to what is being required of the Vendors for the system FSL is offering. If this information is not made available to all Vendors, it would offer an unfair competitive advantage to the incumbent Vendor.
5. The ejet and ijet systems are now being offered as GFE. Please provide a complete scaling study for ws7-9 on each system similar to what is required of the vendors. This will allow all vendors to use the systems as part of their solutions. If this information is not made available to all Vendors, it would offer an unfair competitive advantage to the incumbent Vendor.
6. Is the Bidder required to provide Systems Administration resources for the JET GFE or is this service to be provided by the Government. If the Government will provide systems administration support for the JET GFE, will this reduce the number of Government provided Systems Administrators the Government had planned to make available to Bidders for Vendor supplied equipment?

Answer: 1. iJet is not under maintenance, eJet is maintained by our incumbent HPTi through an agreement with its subcontractors (Aspen Systems, Extreme Networks and DDN). For eJet, not all components are separately bid thus we cannot give the current maintenance costs.

2. The Government does not have specific contacts other than with its prime (HPTi). Since it is possible to acquire maintenance from companies other than OEMs for some of this equipment, the Government does not endorse any particular supplier for maintenance. Most of the OEMs are aware of the "FSL" systems and should be able to provide maintenance quotes.

3. Yes, see question 458 when posted.

4. See question 457 when posted.

5. See question 457 when posted. (appears to be a restatement of 4 above)

6. If the offeror elects to use any GFE, the offeror is responsible for administration and maintenance as if it had offered equipment provided via other means.

**Question 467:** Archived.

**Question 468:** We request a minimum 30 day extension to the due date for this proposal. Given the new information that includes GFE equipment at both FSL and GFDL, we require additional time to receive answers to the numerous questions, benchmarks need to be rerun

based upon new funding profiles, time will be needed to negotiate maintenance contracts for the new GFE.

Answer: See response to Question 446.

**Question 469:** Please clarify the FSL archive data size given the change in the program schedule. What will the total size of the data holdings be at the beginning of FY08?

Answer: See response to Question 454.

**Question 470:** Please explain to the Offerors the method that the Government is using to evaluate the SLT values for each workstream. What methodology or approach is the Government using to convert SLT values for each workstream for each contract year into a score for evaluation?

At midlife, the number of possible allocations of new equipment and old equipment among workstreams is large. Because the performance/price ratios for the two generations of equipment will be different, the Government's guidance on cost allocation between workstreams does not necessarily prevent performance imbalances between workstreams. Without knowing what approach the Government is using to turn SLTs into scores, the Offerors cannot know how to allocate processors to workstreams in a manner that provides the best value to the Government.

Answer: The Government is using the evaluation mechanism expressed in the RFP. We are not evaluating on the basis of numerical scores, but rather on adjectival ratings. The Government looks across all 9 workstreams to determine the best value to the Government for compute capability. Offerors should remember that there are three roughly equal major categories which the Government evaluates.

**Question 471:** Section C.5.2.1 (Page 9), Home File System (HFS), requires that the HFS be globally visible to the specific Subsystem with which it is associated. If the Offeror chooses to use the GFE Jet system (eJet, iJet, or both) without significant modification and also to add a future system for WS7-9, does the Government require that the HFSs for the current and future systems be globally visible to both systems (current and future)? If global visibility continues to be required, sufficient information is needed to integrate the existing HFS for Jet with a future system.

Answer: Yes, global visibility of the HFS is required for the legacy systems as well.

NFS is an acceptable transport for the HFS to the legacy system. The Government anticipates that at least Gigabit ethernet connectivity is necessary. The GFE HFS is a heavily tuned Linux NFS server achieving 40-45MBytes/sec aggregate to the cluster.

**Question 472:** Please clarify the GFE list for FSL (C.12, pages 102-103) with respect to the description of the existing FSL HFS (C.10.3.1.2, page 55). It is unclear whether or not all of the components of the existing Jet filesystems (particularly the file servers) are being offered as GFE. Would the Government please either:

- a) state categorically that all components currently used in Jet operations are being offered as GFE, or
- b) identify all specific components of the Jet system that are not being offered as GFE.

Answer: In Amendment 0015, scheduled for release by January 20, 2006, both eJet and iJet will be removed from the GFE list for FSL (Section C.12, pages 102-103). This question is no longer applicable.

**Question 473:** In the RFP benchmark section J.1.4.2.4 the performance of ws7 shows a forecast time of 3015 seconds on 140 MPI tasks and 142 processor cores. In the most recent data posted to the website, jet scaling tables, the forecast time is listed as 3627 seconds on 143+1 processors. Please explain this discrepancy. Please also explain the discrepancy in 3D-var Analysis times (176 vs 114 ) and the Pre-processing times (135 vs 147.7).

Answer: The tables provided did not include appropriate compiler optimizations. These were compiled with switches that ensure binary reproducibility across various configurations (using the distributed makefile), but did not take advantage of more aggressive optimizations. New tables are being generated and will be available on 1/12/06.

**Question 474:** The government has recently offered the eJet and iJet systems as GFE. No vendors other than the incumbent vendor have access to these systems. This potentially offers a significant and unfair competitive advantage to the incumbent vendor. In order to make it fair for all bidders, we request that if vendors choose to use the GFE for SLT they must use as their run times the times that are published in the jet scaling tables. Vendors are free to choose the number of processors and copies of each workstream to run on the jet systems provided the number of processors used are consistent with the data that has been published by the government for this RFP. Thus, given the only data that has been published so far is for ws7, all vendors must choose to run ws7 on ijet or ejet on 6+1, 35+1, 77+1, 99+1, 143+1 or 221+1 processors. The elapsed times must be those specified in the jet tables. Additionally the government must accept these run times during acceptance since it is their numbers that vendors must use. No additional acceptance is required of the GFE systems.

Answer: It is important to note that the incumbent does NOT have the right to benchmark on the installed system. Since these codes are now out of date, it is extremely unlikely that the incumbent may acquire any additional information regarding the performance of these specific codes.

If an offeror chooses to use the numbers the Government has provided, then the Government will accept these numbers as factual. The offerors are free to suggest alternative compilers or other systems software support that may make the benchmarks (and other codes) perform better. If this is the case, the Government will analyze the proposed approach and assign appropriate risk. The Government is unlikely to accept performance optimizations to the source code of the benchmarks themselves for the GFE systems.

Since all offerors have a fair amount of experience with the benchmarks, it is not inappropriate to interpolate performance figures (extrapolation may not be appropriate).

Again, the Government will evaluate the proposed performance numbers and assign appropriate risk.

With respect to acceptance, the decision to run acceptance testing on the new system shall remain at the discretion of the Government. For example, if an offeror substantially changes the software configuration of the system, the Government may be inclined to ensure that the software changes are stable.

**Question 475:** Please provide the serial numbers for the GFE SGI Origen 3800s so we can obtain a maintenance quote.

Answer: There are two SGI Origin 3800s in Section C.12 of the RFP. The serial numbers are: L1000096 and L1000097.

**Question 476:** Based upon the significant changes contained within Amendment 14 with respect to newly added GFE equipment, this vendor requests a minimum 45 day extension from the point outstanding critical questions are completely answered. We realize that this is a substantial request, but we believe that substantial rework will be required given the late stage of the procurement and the potential impact to bidders' existing proposals.

Answer: The Government will consider requests for extension to the current proposal due date (January 30, 2006) after offerors have had an opportunity to review Amendment 0015 which should be released by January 20, 2006. Amendment 0015 deletes the iJet and ejet from the GFE list for Boulder, CO.

**Question 477:** It would be helpful if the Government labeled items changed on their website with dates so it is clear there are new changes (i.e. Jet Scaling data should have a new date associated with it).

Answer: The Government will be releasing Amendment 15 later this week. In Amendment 0015 both eJet and iJet will be removed from the GFE list for FSL (Section C.12, pages 102-103). The web page displaying the Jet scaling date will be removed.

**Question 478:** PROPRIETARY

**Question 479:** As of 3:00 PM on Friday 1/13 when we try to access the jet scaling tables we get the following messages:

Not Found

The requested URL /jetscaling.html was not found on this server. Apache/2.0.52 (Red Hat) Server at rdhpcs.noaa.gov Port 8082. Please advise.

Answer: As of 8:30 AM (Eastern) on 01/17/06 - the web page serving the JET Scaling tables (<http://rdhpcs.noaa.gov/jetscaling.html>) is available and working.

**Question 480:** PROPRIETARY