

Exhibit 300: Capital Asset Plan and Business Case Summary**Part I: Summary Information And Justification (All Capital Assets)****Section A: Overview (All Capital Assets)**

1. Date of Submission: 9/10/2007
2. Agency: Department of Energy
3. Bureau: Energy Programs
4. Name of this Capital Asset: PNNL EMSL Molecular Science Computing Facility (MSCF)
5. Unique Project (Investment) Identifier: (For IT investment only, see section 53. For all other, use agency ID system.) 019-20-01-21-01-1026-00
6. What kind of investment will this be in FY2009? (Please NOTE: Investments moving to O&M in FY2009, with Planning/Acquisition activities prior to FY2009 should not select O&M. These investments should indicate their current status.) Mixed Life Cycle
7. What was the first budget year this investment was submitted to OMB? FY2001 or earlier

8. Provide a brief summary and justification for this investment, including a brief description of how this closes in part or in whole an identified agency performance gap:

The Molecular Science Computing Facility (MSCF) is a Mixed Life Cycle investment which is part of the Environmental Molecular Sciences Laboratory (EMSL), a U.S. Department of Energy (DOE) national scientific user facility located at Pacific Northwest National Laboratory (PNNL). The MSCF, managed by the DOE Office of Science (SC) Biological and Environmental Research (BER) Program, provides supercomputing capability to accomplish DOE strategic goal 3.1 to further the President's American Competitiveness Initiative.

MSCF provides supercomputer time and high-capacity data storage systems to its users. MSCF is the only computing facility in the DOE complex that optimizes its systems for the needs of environmental molecular sciences. For example, it is a key tool in DOE's efforts to predict contaminant movement and the impact of remediation methods at contaminated DOE sites, enhance chemical processes (e.g., catalysis) for more efficient energy utilization and less environmental impact, and improve the general understanding of complex and coupled chemical, biological and physical processes. Following best practices, MSCF maintains a system lifecycle in which high performance systems are replaced every three years. New systems are acquired by procuring commercially available hardware and software via fixed price contracts. Procurement cycles are timed so that new systems complete acceptance when the previous-generation system reaches obsolescence. The current supercomputer is a Linux-based system with a peak performance of 11.8 teraflops and 9.7 terabytes of memory. MSCF supercomputer time is made available to users funded by DOE's basic (Biological and Environmental Research, Basic Energy Sciences, etc.) and applied R&D (Environmental Management, Legacy Management, Nuclear Energy, Energy Efficiency) programs, as well as users funded by other Federal agencies (e.g., NSF, NIH, USGS, DOD, EPA, etc.)

During development of the BY09 business case, MSCF Project Management reevaluated the investment's PMA alignment and determined it supported only the R&D Investment Criteria in the PMA (as no PMA e-Gov initiative exists for high performance computing). MSCF supports the Scientific and Technological Research and Innovation sub-function of the General Science and Innovation LOB of the Services for Citizens business area of the BRM, and provides computational resources as "Services for Citizens" (001109026) in "Research and Development" (002202069)

9. Did the Agency's Executive/Investment Committee approve this request? Yes
- a. If "yes," what was the date of this approval? 1/17/2007
10. Did the Project Manager review this Exhibit? Yes
11. Contact information of Project Manager?
- Name Day, Jeff
- Phone Number 509-372-4629
- Email jeffrey.day@pnso.science.doe.gov
- a. What is the current FAC-P/PM certification level of the TBD

project/program manager?

12. Has the agency developed and/or promoted cost effective, energy-efficient and environmentally sustainable techniques or practices for this project? Yes

a. Will this investment include electronic assets (including computers)? Yes

b. Is this investment for new construction or major retrofit of a Federal building or facility? (answer applicable to non-IT assets only) No

1. If "yes," is an ESPC or UESC being used to help fund this investment?

2. If "yes," will this investment meet sustainable design principles?

3. If "yes," is it designed to be 30% more energy efficient than relevant code?

13. Does this investment directly support one of the PMA initiatives? Yes

If "yes," check all that apply:

R and D Investment Criteria

a. Briefly and specifically describe for each selected how this asset directly supports the identified initiative(s)? (e.g. If E-Gov is selected, is it an approved shared service provider or the managing partner?)

MSCF supports the PMA's Research and Development Investment Criteria Program Initiative to improve the performance of DOE's applied R&D programs. EMSL resources, including the MSCF are made available to scientists and engineers funded by DOE's applied R&D programs. Current projects include research on hydrogen storage, waste containment, catalyst design, and other areas of applied R&D of interest to DOE (see http://mscf.emsl.pnl.gov/research/intro_cgca.shtml for details).

14. Does this investment support a program assessed using the Program Assessment Rating Tool (PART)? (For more information about the PART, visit www.whitehouse.gov/omb/part.) Yes

a. If "yes," does this investment address a weakness found during a PART review? No

b. If "yes," what is the name of the PARTed program? DOE Biological and Environmental Research

c. If "yes," what rating did the PART receive? Effective

15. Is this investment for information technology? Yes

If the answer to Question 15 is "Yes," complete questions 16-23 below. If the answer is "No," do not answer questions 16-23.

For information technology investments only:

16. What is the level of the IT Project? (per CIO Council PM Guidance) Level 2

17. What project management qualifications does the Project Manager have? (per CIO Council PM Guidance) (1) Project manager has been validated as qualified for this investment

18. Is this investment or any project(s) within this investment identified as "high risk" on the Q4 - FY 2007 agency high risk report (per OMB Memorandum M-05-23) No

19. Is this a financial management system? No

a. If "yes," does this investment address a FFMIA compliance area?

1. If "yes," which compliance area:

2. If "no," what does it address?

b. If "yes," please identify the system name(s) and system acronym(s) as reported in the most recent financial systems inventory update required by Circular A-11 section 52

20. What is the percentage breakout for the total FY2009 funding request for the following? (This should total 100%)

Hardware 59

Software 19

Services 12
 Other 10
 21. If this project produces information dissemination products for the public, are these products published to the Internet in conformance with OMB Memorandum 05-04 and included in your agency inventory, schedules and priorities? No
 22. Contact information of individual responsible for privacy related questions:
 Name Regimbal, Kevin
 Phone Number 509-376-2246
 Title Manager, High Performance Computing and Network Services
 E-mail kevin.regimbal@pnl.gov
 23. Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval? Yes
 Question 24 must be answered by all Investments:
 24. Does this investment directly support one of the GAO High Risk Areas? No

Section B: Summary of Spending (All Capital Assets)

1. Provide the total estimated life-cycle cost for this investment by completing the following table. All amounts represent budget authority in millions, and are rounded to three decimal places. Federal personnel costs should be included only in the row designated "Government FTE Cost," and should be excluded from the amounts shown for "Planning," "Full Acquisition," and "Operation/Maintenance." The "TOTAL" estimated annual cost of the investment is the sum of costs for "Planning," "Full Acquisition," and "Operation/Maintenance." For Federal buildings and facilities, life-cycle costs should include long term energy, environmental, decommissioning, and/or restoration costs. The costs associated with the entire life-cycle of the investment should be included in this report.

Table 1: SUMMARY OF SPENDING FOR PROJECT PHASES (REPORTED IN MILLIONS)									
<i>(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)</i>									
	PY-1 and earlier	PY 2007	CY 2008	BY 2009	BY+1 2010	BY+2 2011	BY+3 2012	BY+4 and beyond	Total
Planning:	0.68	0.915	0.82	0					
Acquisition:	26.833	2.74	0	0					
Subtotal Planning & Acquisition:	27.513	3.655	0.82	0					
Operations & Maintenance:	26.087	5.945	11.58	12.5					
TOTAL:	53.600	9.600	12.40	12.5					
Government FTE Costs should not be included in the amounts provided above.									
Government FTE Costs	0.03	0.03	0.03	0.03					
Number of FTE represented by Costs:	1	1	1	1					

Note: For the multi-agency investments, this table should include all funding (both managing partner and partner agencies). Government FTE Costs should not be included as part of the TOTAL represented.

2. Will this project require the agency to hire additional FTE's? No
 a. If "yes," How many and in what year?
 3. If the summary of spending has changed from the FY2008 President's budget request, briefly explain those changes:
 Due to the lengthy Continuing Resolution for FY 2007, DOE-BER reprioritized and redistributed \$2.7M of FY07 funding to critical needs within the EMSL program, and shifted \$1.3M of user services scope into the MSCF consistent with other DOE/SC high performance computer centers.

Section C: Acquisition/Contract Strategy (All Capital Assets)

1. Complete the table for all (including all non-Federal) contracts and/or task orders currently in place or planned for this investment. Total Value should include all option years for each contract. Contracts and/or task orders completed do not need to be included.

Exhibit 300: PNNL EMSL Molecular Science Computing Facility (MSCF) (Revision 13)

Contracts/Task Orders Table:															* Costs in millions	
Contract or Task Order Number	Type of Contract/ Task Order	Has the contract been awarded (Y/N)	If so what is the date of the award? If not, what is the planned award date?	Start date of Contract/ Task Order	End date of Contract/ Task Order	Total Value of Contract/ Task Order (\$M)	Is this an Interagency Acquisition ? (Y/N)	Is it performance based? (Y/N)	Competitively awarded? (Y/N)	What, if any, alternative financing option is being used? (ESPC, UESC, EUL, N/A)	Is EVM in the contract? (Y/N)	Does the contract include the required security & privacy clauses? (Y/N)	Name of CO	CO Contact information (phone/em ail)	Contracting Officer Certification Level (Level 1,2,3,N/A)	If N/A, has the agency determined the CO assigned has the competencies and skills necessary to support this acquisition ? (Y/N)
MSCF Facilities Expansion (17059)	Firm Fixed Price	Yes	5/24/2005	5/24/2005	12/30/2006	2.5	No	Yes	Yes	NA	Yes	Yes	Short, Jeff	509-372-4023 / jeff.short@p nso.science.doe.gov	N/A	Yes
IBM Backup (24233)	Firm Fixed Price	Yes	3/15/2006	4/15/2006	5/15/2006	0.4	No	Yes	Yes	NA	Yes	Yes	Short, Jeff	509-372-4023 / jeff.short@p nso.science.doe.gov	N/A	Yes
HPCS-2 (2835)	Firm Fixed Price	Yes	4/16/2002	5/18/2002	9/30/2006	26.9	No	Yes	Yes	NA	Yes	Yes	Short, Jeff	509-372-4023 / jeff.short@p nso.science.doe.gov	N/A	Yes
PNNL M&O EMSL: MSCF Task	Cost Reimbursable	Yes	10/3/2003	10/3/2003	9/30/2007	27.7	No	Yes	Yes	NA	Yes	Yes	Short, Jeff	509-372-4023 / jeff.short@p nso.science.doe.gov	N/A	Yes
HP Memory Standardization / Upgrade (31312)	Firm Fixed Price	Yes	8/23/2006	8/23/2006	9/10/2007	0.7	No	Yes	Yes	NA	Yes	Yes	Short, Jeff	509-372-4023 / jeff.short@p nso.science.doe.gov	N/A	Yes
Archive Storage (45134)	Firm Fixed Price	Yes	5/30/2007	5/30/2007	5/30/2008	0.4	No	Yes	Yes	NA	Yes	Yes	Short, Jeff	509-372-4023 / jeff.short@p nso.science.doe.gov	N/A	Yes

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:

EVM is used to manage cost, schedule, and performance in all of the above.

3. Do the contracts ensure Section 508 compliance? Yes

a. Explain why: DOE policy mandates all new system procurements to include requirements that have provisions for Electronic and Information Technology (EIT) Accessibility Standards (for telecommunication products, information kiosks, etc.). As part of the Management and Operations contract for PNNL (which includes the EMSL and therefore the MSCF), MSCF and its system components comply with all section 508 standards and requirements for system accessibility.

4. Is there an acquisition plan which has been approved in accordance with agency requirements? Yes

a. If "yes," what is the date? 2/16/2007

b. If "no," will an acquisition plan be developed?

1. If "no," briefly explain why:

Section D: Performance Information (All Capital Assets)

In order to successfully address this area of the exhibit 300, performance goals must be provided for the agency and be linked to the annual performance plan. The investment must discuss the agency's mission and strategic goals, and performance measures (indicators) must be provided. These goals need to map to the gap in the agency's strategic goals and objectives this investment is designed to fill. They are the internal and external performance benefits this investment is expected to deliver to the agency (e.g., improve efficiency by 60 percent, increase citizen participation by 300 percent a year to achieve an overall citizen participation rate of 75 percent by FY 2xxx, etc.). The goals must be clearly measurable investment outcomes, and if applicable, investment outputs. They do not include the completion date of the module, milestones, or investment, or general goals, such as, significant, better, improved that do not have a quantitative or qualitative measure.

Agencies must use the following table to report performance goals and measures for the major investment and use the Federal Enterprise Architecture (FEA) Performance Reference Model (PRM). Map all Measurement Indicators to the corresponding "Measurement Area" and "Measurement Grouping" identified in the PRM. There should be at least one Measurement Indicator for each of the four different Measurement Areas (for each fiscal year). The PRM is available at www.egov.gov. The table can be extended to include performance measures for years beyond FY 2009.

Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
2007	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Customer Results	Timeliness and Responsiveness	Response Time	Improve overall response time to customer support requests.	N/A (New Metric)	240 Minutes	213 minutes as of 7/10/2007. On track to meet FY2007 goal.
2007	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation	Increase # of node hours used by scientific users. MSCF users will be able to use more node hours on MPP2 than in the previous year due to both increased system availability and improved stability and efficiency of user code.	6.7 million node hours. (Equal to FY06 91,000 Teraflop Hours utilization goal)	7.0 million node hours	5.4 million node hours as of 6/30/2007. On track to meet FY2007 goal.
2007	GOAL 3.1 Scientific Discovery –	Processes and Activities	Productivity and Efficiency	Efficiency	Increase MPP2 availability. MPP2 will	92% Availability	93% Availability	97% Availability as of 6/30/2007.

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Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
	Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.				provide better availability than in the previous year due to improved system stability and operational processes.			
2007	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Technology	Information and Data	Data Storage	Increase # of Terabytes available for archive of scientific data. The EMSL data archive will receive disk and tape expansions, making more Terabytes of storage space available than in the previous year.	750 Terabytes	1,500 TeraBytes	792 Terabytes as of 5/28/2007. On track to meet FY2007 goal.
2008	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Customer Results	Timeliness and Responsiveness	Response Time				
2008	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation				
2008	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Processes and Activities	Productivity and Efficiency	Efficiency				
2008	GOAL 3.1 Scientific Discovery –	Technology	Information and Data	Data Storage				

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Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
	Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.							
2009	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Customer Results	Timeliness and Responsiveness	Response Time				
2009	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation				
2009	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Processes and Activities	Productivity and Efficiency	Efficiency				
2009	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Technology	Information and Data	Data Storage				
2010	GOAL 3.1 Scientific Discovery –	Customer Results	Timeliness and Responsiveness	Response Time				

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Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
	Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.							
2010	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation				
2010	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Processes and Activities	Productivity and Efficiency	Efficiency				
2010	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Technology	Information and Data	Data Storage				
2011	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Customer Results	Timeliness and Responsiveness	Response Time				
2011	GOAL 3.1 Scientific Discovery –	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and				

Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
	Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.			Innovation				
2011	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Processes and Activities	Productivity and Efficiency	Efficiency				
2011	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Technology	Information and Data	Data Storage				
2012	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Customer Results	Timeliness and Responsiveness	Response Time				
2012	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation				
2012	GOAL 3.1 Scientific Discovery –	Processes and Activities	Productivity and Efficiency	Efficiency				

Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
	Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.							
2012	GOAL 3.1 Scientific Discovery – Achieve the major scientific discoveries that will drive U.S. competitiveness, inspire America, and revolutionize our approaches to the Nation's energy, national security, and environmental quality challenges.	Technology	Information and Data	Data Storage				

Section E: Security and Privacy (IT Capital Assets only)

In order to successfully address this area of the business case, each question below must be answered at the system/application level, not at a program or agency level. Systems supporting this investment on the planning and operational systems security tables should match the systems on the privacy table below. Systems on the Operational Security Table must be included on your agency FISMA system inventory and should be easily referenced in the inventory (i.e., should use the same name or identifier).

For existing Mixed-Life Cycle investments where enhancement, development, and/or modernization is planned, include the investment in both the "Systems in Planning" table (Table 3) and the "Operational Systems" table (Table 4). Systems which are already operational, but have enhancement, development, and/or modernization activity, should be included in both Table 3 and Table 4. Table 3 should reflect the planned date for the system changes to be complete and operational, and the planned date for the associated C&A update. Table 4 should reflect the current status of the requirements listed. In this context, information contained within Table 3 should characterize what updates to testing and documentation will occur before implementing the enhancements; and Table 4 should characterize the current state of the materials associated with the existing system.

All systems listed in the two security tables should be identified in the privacy table. The list of systems in the "Name of System" column of the privacy table (Table 8) should match the systems listed in columns titled "Name of System" in the security tables (Tables 3 and 4). For the Privacy table, it is possible that there may not be a one-to-one ratio between the list of systems and the related privacy documents. For example, one PIA could cover multiple systems. If this is the case, a working link to the PIA may be listed in column (d) of the privacy table more than once (for each system covered by the PIA).

The questions asking whether there is a PIA which covers the system and whether a SORN is required for the system are discrete from the narrative fields. The narrative column provides an opportunity for free text explanation why a working link is not provided. For example, a SORN may be required for the system, but the system is not yet operational. In this circumstance, answer "yes" for column (e) and in the narrative in column (f), explain that because the system is not operational the SORN is not yet required to be published.

Please respond to the questions below and verify the system owner took the following actions:

1. Have the IT security costs for the system(s) been identified and integrated into the overall costs of the investment:
 - a. If "yes," provide the "Percentage IT Security" for the budget year:
2. Is identifying and assessing security and privacy risks a part of the overall risk management effort for each system supporting or part of this investment.

3. Systems in Planning and Undergoing Enhancement(s), Development, and/or Modernization - Security Table(s):			
Name of System	Agency/ or Contractor Operated System?	Planned Operational Date	Date of Planned C&A update (for existing mixed life cycle systems) or Planned Completion Date (for new systems)
HPCS-3			

4. Operational Systems - Security Table:							
Name of System	Agency/ or Contractor Operated System?	NIST FIPS 199 Risk Impact level (High, Moderate, Low)	Has C&A been Completed, using NIST 800-37? (Y/N)	Date Completed: C&A	What standards were used for the Security Controls tests? (FIPS 200/NIST 800-53, NIST 800-26, Other, N/A)	Date Complete(d): Security Control Testing	Date the contingency plan tested
HPCS-2							

5. Have any weaknesses, not yet remediated, related to any of the systems part of or supporting this investment been identified by the agency or IG?

a. If "yes," have those weaknesses been incorporated into the agency's plan of action and milestone process?

6. Indicate whether an increase in IT security funding is requested to remediate IT security weaknesses?

a. If "yes," specify the amount, provide a general description of the weakness, and explain how the funding request will remediate the weakness.

7. How are contractor security procedures monitored, verified, and validated by the agency for the contractor systems above?

8. Planning & Operational Systems - Privacy Table:					
(a) Name of System	(b) Is this a new system? (Y/N)	(c) Is there at least one Privacy Impact Assessment (PIA) which covers this system? (Y/N)	(d) Internet Link or Explanation	(e) Is a System of Records Notice (SORN) required for this system? (Y/N)	(f) Internet Link or Explanation
HPCS-2	No	No	No, the system does not contain, process, or transmit personal identifying information	No	The system is not a Privacy Act system of records.
HPCS-3	Yes	No	No, the system does not contain, process, or transmit personal identifying information	No	The system is not a Privacy Act system of records

Details for Text Options:
 Column (d): If yes to (c), provide the link(s) to the publicly posted PIA(s) with which this system is associated. If no to (c), provide an explanation why the PIA has not been publicly posted or why the PIA has not been conducted.
 Column (f): If yes to (e), provide the link(s) to where the current and up to date SORN(s) is published in the federal register. If no to (e), provide an explanation why the SORN has not been published or why there isn't a current and up to date SORN.
 Note: Working links must be provided to specific documents not general privacy websites. Non-working links will be considered as a blank field.

Section F: Enterprise Architecture (EA) (IT Capital Assets only)

In order to successfully address this area of the capital asset plan and business case, the investment must be included in the agency's EA and Capital Planning and Investment Control (CPIC) process and mapped to and supporting the FEA. The business case must demonstrate the relationship between the investment and the business, performance, data, services, application, and technology layers of the agency's EA.

1. Is this investment included in your agency's target enterprise architecture? Yes

a. If "no," please explain why?

2. Is this investment included in the agency's EA Transition Strategy? Yes

a. If "yes," provide the investment name as identified in the Transition Strategy provided in the agency's most recent annual EA Assessment. Office of Science PNNL Molecular Sciences Computing Facility (SC PNNL MSCF) found in DOE's EA Transition Plan section 2.1.4.1 Core Mission - Scientific Research

b. If "no," please explain why?

3. Is this investment identified in a completed (contains a No

target architecture) and approved segment architecture?

a. If "yes," provide the name of the segment architecture as Scientific Research provided in the agency's most recent annual EA Assessment.

4. Service Component Reference Model (SRM) Table:
 Identify the service components funded by this major IT investment (e.g., knowledge management, content management, customer relationship management, etc.). Provide this information in the format of the following table. For detailed guidance regarding components, please refer to <http://www.egov.gov>.

Agency Component Name	Agency Component Description	FEA SRM Service Domain	FEA SRM Service Type	FEA SRM Component (a)	Service Component Reused Name (b)	Service Component Reused UPI (b)	Internal or External Reuse? (c)	BY Funding Percentage (d)
Facility Preparation	Design services contracted by PNNL for the design of facility modifications necessary to prepare for HPCS-4 equipment scheduled to arrive in 2011	Back Office Services	Asset / Materials Management	Facilities Management			No Reuse	
NWfs. EMSL scientific data archive provided by MSCF	COTS Hardware, COTS and public domain software, service contract, and service provided by MSCF staff provided to store, archive and recover from tape scientific user data.	Back Office Services	Data Management	Data Warehouse			No Reuse	
High Performance Computation Services	COTS Hardware, COTS and public domain software and service contract provided by the HPCS-3 solution vendor and service provided by MSCF staff. Supports running of scientific simulation.	Business Analytical Services	Knowledge Discovery	Simulation			No Reuse	
MSCF Project Planning	Service provided by MSCF staff for the management and control of a particular effort of an organization.	Business Management Services	Management of Processes	Program / Project Management			No Reuse	

a. Use existing SRM Components or identify as "NEW". A "NEW" component is one not already identified as a service component in the FEA SRM.

b. A reused component is one being funded by another investment, but being used by this investment. Rather than answer yes or no, identify the reused service component funded by the other investment and identify the other investment using the Unique Project Identifier (UPI) code from the OMB Ex 300 or Ex 53 submission.

c. 'Internal' reuse is within an agency. For example, one agency within a department is reusing a service component provided by another agency within the same department. 'External' reuse is one agency within a department reusing a service component provided by another agency in another department. A good example of this is an E-Gov initiative service being reused by multiple organizations across the federal government.

d. Please provide the percentage of the BY requested funding amount used for each service component listed in the table. If external, provide the percentage of the BY requested funding amount transferred to another agency to pay for the service. The percentages in the column can, but are not required to, add up to 100%.

5. Technical Reference Model (TRM) Table:
 To demonstrate how this major IT investment aligns with the FEA Technical Reference Model (TRM), please list the Service Areas, Categories, Standards, and Service Specifications supporting this IT investment.

FEA SRM Component (a)	FEA TRM Service Area	FEA TRM Service Category	FEA TRM Service Standard	Service Specification (b) (i.e., vendor and product name)
Simulation	Component Framework	Data Management	Database Connectivity	
Access Control	Component Framework	Security	Supporting Security Services	

Exhibit 300: PNNL EMSL Molecular Science Computing Facility (MSCF) (Revision 13)

5. Technical Reference Model (TRM) Table:

To demonstrate how this major IT investment aligns with the FEA Technical Reference Model (TRM), please list the Service Areas, Categories, Standards, and Service Specifications supporting this IT investment.

FEA SRM Component (a)	FEA TRM Service Area	FEA TRM Service Category	FEA TRM Service Standard	Service Specification (b) (i.e., vendor and product name)
Data Warehouse	Service Access and Delivery	Access Channels	Other Electronic Channels	
Simulation	Service Access and Delivery	Access Channels	Other Electronic Channels	
Simulation	Service Access and Delivery	Access Channels	Other Electronic Channels	
Simulation	Service Access and Delivery	Access Channels	Other Electronic Channels	
Simulation	Service Access and Delivery	Access Channels	Other Electronic Channels	
Simulation	Service Access and Delivery	Access Channels	Other Electronic Channels	
Simulation	Service Access and Delivery	Access Channels	Other Electronic Channels	
Program / Project Management	Service Access and Delivery	Access Channels	Other Electronic Channels	
Facilities Management	Service Access and Delivery	Access Channels	Other Electronic Channels	
Data Warehouse	Service Access and Delivery	Access Channels	Other Electronic Channels	
Data Warehouse	Service Access and Delivery	Access Channels	Other Electronic Channels	
Simulation	Service Access and Delivery	Access Channels	Web Browser	
Simulation	Service Access and Delivery	Delivery Channels	Internet	
Simulation	Service Access and Delivery	Delivery Channels	Intranet	
Data Warehouse	Service Access and Delivery	Delivery Channels	Intranet	
Simulation	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on	
Access Control	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on	
Access Control	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on	
Data Warehouse	Service Access and Delivery	Service Transport	Service Transport	
Simulation	Service Access and Delivery	Service Transport	Service Transport	
Simulation	Service Access and Delivery	Service Transport	Service Transport	
Simulation	Service Access and Delivery	Service Transport	Service Transport	
Access Control	Service Access and Delivery	Service Transport	Service Transport	
Data Warehouse	Service Access and Delivery	Service Transport	Service Transport	
Data Warehouse	Service Access and Delivery	Service Transport	Service Transport	
Simulation	Service Access and Delivery	Service Transport	Supporting Network Services	
Simulation	Service Access and Delivery	Service Transport	Supporting Network Services	
Simulation	Service Access and Delivery	Service Transport	Supporting Network Services	
Simulation	Service Access and Delivery	Service Transport	Supporting Network Services	
Simulation	Service Platform and Infrastructure	Database / Storage	Database	
Simulation	Service Platform and Infrastructure	Database / Storage	Database	
Data Warehouse	Service Platform and Infrastructure	Database / Storage	Storage	
Data Warehouse	Service Platform and Infrastructure	Database / Storage	Storage	
Simulation	Service Platform and Infrastructure	Database / Storage	Storage	
Simulation	Service Platform and Infrastructure	Database / Storage	Storage	
Data Warehouse	Service Platform and Infrastructure	Database / Storage	Storage	
Data Warehouse	Service Platform and Infrastructure	Database / Storage	Storage	
Simulation	Service Platform and Infrastructure	Hardware / Infrastructure	Embedded Technology Devices	
Simulation	Service Platform and Infrastructure	Hardware / Infrastructure	Embedded Technology Devices	
Simulation	Service Platform and Infrastructure	Hardware / Infrastructure	Embedded Technology Devices	
Simulation	Service Platform and Infrastructure	Hardware / Infrastructure	Local Area Network (LAN)	
Simulation	Service Platform and Infrastructure	Hardware / Infrastructure	Local Area Network (LAN)	
Simulation	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	

Exhibit 300: PNNL EMSL Molecular Science Computing Facility (MSCF) (Revision 13)

5. Technical Reference Model (TRM) Table:

To demonstrate how this major IT investment aligns with the FEA Technical Reference Model (TRM), please list the Service Areas, Categories, Standards, and Service Specifications supporting this IT investment.

FEA SRM Component (a)	FEA TRM Service Area	FEA TRM Service Category	FEA TRM Service Standard	Service Specification (b) (i.e., vendor and product name)
Simulation	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	
Simulation	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	
Simulation	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	
Data Warehouse	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	
Simulation	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment	
Simulation	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment	
Access Control	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment	
Simulation	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	
Simulation	Service Platform and Infrastructure	Support Platforms	Platform Dependent	
Simulation	Service Platform and Infrastructure	Support Platforms	Platform Dependent	
Simulation	Service Platform and Infrastructure	Support Platforms	Platform Dependent	
Simulation	Service Platform and Infrastructure	Support Platforms	Platform Independent	
Simulation	Service Platform and Infrastructure	Support Platforms	Platform Independent	
Simulation	Service Platform and Infrastructure	Support Platforms	Platform Independent	
Simulation	Service Platform and Infrastructure	Support Platforms	Platform Independent	
Simulation	Service Platform and Infrastructure	Support Platforms	Platform Independent	
Simulation	Service Platform and Infrastructure	Support Platforms	Platform Independent	
Simulation	Service Platform and Infrastructure	Support Platforms	Platform Independent	

a. Service Components identified in the previous question should be entered in this column. Please enter multiple rows for FEA SRM Components supported by multiple TRM Service Specifications

b. In the Service Specification field, agencies should provide information on the specified technical standard or vendor product mapped to the FEA TRM Service Standard, including model or version numbers, as appropriate.

6. Will the application leverage existing components and/or applications across the Government (i.e., FirstGov, Pay.Gov, etc)? No

a. If "yes," please describe.

Exhibit 300: Part II: Planning, Acquisition and Performance Information

Section A: Alternatives Analysis (All Capital Assets)

Part II should be completed only for investments identified as "Planning" or "Full Acquisition," or "Mixed Life-Cycle" investments in response to Question 6 in Part I, Section A above.

In selecting the best capital asset, you should identify and consider at least three viable alternatives, in addition to the current baseline, i.e., the status quo. Use OMB Circular A-94 for all investments and the Clinger Cohen Act of 1996 for IT investments to determine the criteria you should use in your Benefit/Cost Analysis.

- 1. Did you conduct an alternatives analysis for this project? Yes
 - a. If "yes," provide the date the analysis was completed? 5/17/2007
 - b. If "no," what is the anticipated date this analysis will be completed?
 - c. If no analysis is planned, please briefly explain why:

2. Alternative Analysis Results:			* Costs in millions
Use the results of your alternatives analysis to complete the following table:			
Alternative Analyzed	Description of Alternative	Risk Adjusted Lifecycle Costs estimate	Risk Adjusted Lifecycle Benefits estimate
1			
2			
3			
4			

3. Which alternative was selected by the Agency's Executive/Investment Committee and why was it chosen?

Alternative 2: Procure HPCS-3 to replace HPCS-2.

This alternative enhances the capabilities of the existing architecture. The analysis is based upon a 5 year lifecycle comprising fiscal years 2007 through 2011. Alternative 2 (Procure HPCS-3 to replace HPCS-2) was chosen because it gives the greatest benefit for the least cost. The risk adjusted lifecycle cost matches the sum of total costs for fiscal years 2007 through 2011 in the Summary of Spending table in Section II.B. From a scientific standpoint, a series of HPC systems at EMSL provides the best possible system(s) for the types of computation EMSL needs to do. Alternative 1(Keep HPCS-2) does not ensure long-term scientific productivity and the lifecycle benefits are low. The science, speed and robustness of Alternative 2 (Procure HPCS-3 to replace HPCS-2) is superior to the general purpose solutions outlined in Alternatives 3 (Compute at another DOE site) and 4 (Compute at commercial site), and the lifecycle costs are considerably lower.

4. What specific qualitative benefits will be realized?

A new HPCS-3 system will provide greater benefit by being 5 to 10 times more powerful than the existing HPCS-2 system. HPCS-2 will be obsolete in 2008, and maintenance costs would escalate rapidly if it were operated after 2007. Replacing HPCS-2 with a new HPCS-3 system will allow funding to be spent on new capabilities rather than on maintaining obsolescent equipment. This investment will increase the effectiveness of the Office of Science, specifically the Office of Biological & Environmental Research, to provide computational resources to scientists funded by the BER, BES and ASCR programs. By continuing to invest in high performance computing systems that are tailored to meeting the science needs, the Office of Biological & Environmental Research will expand the size and capacity of computational resources available to the critical mission areas that depend on computational power to conduct research.

The new supercomputer will enable American and international scientists to solve today's environmental molecular science problems faster than is now possible, and to solve computational problems that are currently considered too big to tackle. These problems are vital to the interests DOE and the American public it serves, relating as they do to the environmental legacy of nuclear weapons production, the transportation sector, and improved carbon dioxide remediation strategies.

5. Will the selected alternative replace a legacy system in-part No
or in-whole?

- a. If "yes," are the migration costs associated with the migration to the selected alternative included in this investment, the legacy investment, or in a separate migration investment.

- b. If "yes," please provide the following information:

List of Legacy Investment or Systems		
Name of the Legacy Investment of Systems	UPI if available	Date of the System Retirement

Section B: Risk Management (All Capital Assets)

You should have performed a risk assessment during the early planning and initial concept phase of this investment's life-cycle, developed a risk-adjusted life-cycle cost estimate and a plan to eliminate, mitigate or manage risk, and be actively managing risk throughout the investment's life-cycle.

1. Does the investment have a Risk Management Plan? Yes
 - a. If "yes," what is the date of the plan? 8/9/2007
 - b. Has the Risk Management Plan been significantly changed since last year's submission to OMB? Yes
 - c. If "yes," describe any significant changes:

MSCF has split its risk management plans into separate Steady State and DME (for HPCS-3) risk management plans. MSCF has updated its risk inventories and taken steps to better integrate risk management methodologies into its operational practices.

2. If there currently is no plan, will a plan be developed?
 - a. If "yes," what is the planned completion date?
 - b. If "no," what is the strategy for managing the risks?

3. Briefly describe how investment risks are reflected in the life cycle cost estimate and investment schedule:

The largest portion of this investment is allocated to procurement of multiple generations of high performance computers. MSCF proposes to use a firm-fixed price performance-based subcontracts that would require the delivery of systems that are tested and found to have met explicit performance objectives. To assure that the risk of meeting cost goals rests primarily with the vendor(s), contract stipulations would mandate that payment for equipment is not made until it meets acceptance criteria.

For lab integration activities MSCF uses a formal project management process which reflects a consistent, disciplined approach to managing, monitoring, controlling and reporting project progress against quality, cost, and schedule expectations. The Primavera (P3) scheduling tool is used to plan and track project activities and milestones. In-house software (Plan.net) is used to integrate actual cost with progress measurement against a cost and schedule baseline. The project management process coincides with the objectives of ANSI/EIA Standard 748 Earned Value Management System (EVMS) criteria. Using a Performance Measurement Baseline consistent with the EVMS approach the Project Manager identifies, monitors, and assesses achievement or deviation from baseline goals.

A Risk Management Plan (RMP) is developed to document the process to proactively manage risk. The RMP acts as a management tool to mitigate events that may adversely impact the program. The RMP is used to formally document known risks to the program and strategies to mitigate those risks; serve as a basis for identifying alternatives to achieving cost, schedule, and performance goals; and assist decision making on budget priorities.

To meet the risks reflected in the life cycle cost estimate and investment schedule, the RMP is used to:

1. Identify risk to the MSCF
2. Quantify identified risk
3. Determine needed action to address the risk (i.e. avoid, accept or transfer)
4. Determine costs associated with managing the risk
5. Monitor and manage residual risk

The RMP team will review the plan quarterly in order to maintain current information and documentation of the risk posture to the MSCF project.

Section C: Cost and Schedule Performance (All Capital Assets)

EVM is required only on DME portions of investments. For mixed lifecycle investments, O&M milestones should still be included in the table (Comparison of Initial Baseline and Current Approved Baseline). This table should accurately reflect the milestones in the initial baseline, as well as milestones in the current baseline.

1. Does the earned value management system meet the criteria in ANSI/EIA Standard-748? Yes
2. Is the CV% or SV% greater than +/- 10%? (CV%= CV/EV x 100; SV%= SV/PV x 100) No
 - a. If "yes," was it the CV or SV or both?
 - b. If "yes," explain the causes of the variance:
 - c. If "yes," describe the corrective actions:

3. Has the investment re-baselined during the past fiscal year? Yes
 - a. If "yes," when was it approved by the agency head? 1/18/2007

Exhibit 300: PNNL EMSL Molecular Science Computing Facility (MSCF) (Revision 13)

4. Comparison of Initial Baseline and Current Approved Baseline

Complete the following table to compare actual performance against the current performance baseline and to the initial performance baseline. In the Current Baseline section, for all milestones listed, you should provide both the baseline and actual completion dates (e.g., "03/23/2003"/ "04/28/2004") and the baseline and actual total costs (in \$ Millions). In the event that a milestone is not found in both the initial and current baseline, leave the associated cells blank. Note that the 'Description of Milestone' and 'Percent Complete' fields are required. Indicate '0' for any milestone no longer active.

Milestone Number	Description of Milestone	Initial Baseline		Current Baseline				Current Baseline Variance		Percent Complete
		Planned Completion Date (mm/dd/yyyy)	Total Cost (\$M) Estimated	Completion Date (mm/dd/yyyy)		Total Cost (\$M)		Schedule (# days)	Cost (\$M)	
				Planned	Actual	Planned	Actual			
1	FY03 SS HPCS2 Facility Preparation	9/30/2003	\$3	9/30/2003	9/30/2003	\$3	\$2.674	0	\$0.326	100%
2	FY03 DME HPCS-2 Phase 1 (256 Compute Nodes with Elan3)	2/20/2003	\$5.843	2/20/2003	2/20/2003	\$5.843	\$5.743	0	\$0.1	100%
3	FY03 DME HPCS-2 Phase 1 Storage (20 Terabyte Global Filesystem at .5GB/Sec)	10/22/2003	\$2.313	10/22/2003	7/31/2003	\$2.313	\$2.313	83	\$0	100%
4	FY03 DME HPCS-2 Phase 2A Compute (700 1GHz Compute nodes)	10/22/2003	\$2.187	10/22/2003	9/30/2003	\$2.187	\$2.187	22	\$0	100%
5	FY03 DME HPCS-2 Phase 2B Compute nodes (upgrade to 700 1.5GHz compute nodes and integrate with Phase 1)	10/22/2003	\$1.456	10/22/2003	9/30/2003	\$1.456	\$1.456	22	\$0	100%
6	FY04 DME HPCS-2 Phase 2A Storage (50 Terabyte Global Filesystem at 3.2 GB/s)	5/21/2004	\$2.644	5/21/2004	5/21/2004	\$2.644	\$2.544	0	\$0.1	100%
7	FY05 DME HPCS-2 Experimental Systems (8 next generation prototype CPUs)	6/1/2005	\$0.08	6/1/2005	6/1/2005	\$0.08	\$0	0	\$0.08	100%

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Milestone Number	Description of Milestone	Initial Baseline		Current Baseline				Current Baseline Variance		Percent Complete
		Planned Completion Date (mm/dd/yyyy)	Total Cost (\$M) Estimated	Completion Date (mm/dd/yyyy)		Total Cost (\$M)		Schedule (# days)	Cost (\$M)	
				Planned	Actual	Planned	Actual			
8	FY03 SS HPCS-2 Maintenance	9/30/2003	\$2.8	9/30/2003	9/30/2003	\$2.8	\$3.147	0	\$-0.347	100%
9	FY04 SS HPCS-2 Maintenance	9/30/2004	\$3.1	9/30/2004	9/30/2004	\$3.1	\$2.965	0	\$0.135	100%
10	FY05 SS HPCS-2 Maintenance	9/30/2005	\$4	9/30/2005	9/30/2005	\$3.835	\$3.213	0	\$0.622	100%
11	FY04 DME EMSL Storage (Storage for HPC, mass spec, and EMSL biology storage needs)	3/31/2004	\$3.5	9/30/2005	9/30/2005	\$3.382	\$1.537	0	\$1.845	100%
12	FY04 SS MSCF Facility Prep	9/30/2004	\$0.456	9/30/2004	9/30/2004	\$0.456	\$0.206	0	\$0.25	100%
13	FY04 DME HPCS-2 Phase 2C Computer	9/30/2004	\$2.724	9/30/2004	9/30/2004	\$2.724	\$2.954	0	\$-0.23	100%
14	FY05 DME HPCS-2 Phase 2C Computer	9/30/2005	\$5.136	9/30/2005	6/30/2005	\$5.136	\$5.1	92	\$0.036	100%
15	FY05 SS MSCF Facility Prep	9/30/2005	\$1.432	9/30/2005	9/30/2005	\$1.432	\$1.371	0	\$0.061	100%
16	FY06 SS MSCF Facility Prep	7/31/2006	\$3.012	11/30/2007		\$3.012	\$2.208		\$0.77388	99%
17	FY06 DME Lab Integration HPCS-3	9/30/2006	\$0.68	9/30/2006	9/30/2006	\$0.68	\$0.38	0	\$0.3	100%
18	FY06 SS HPCS-2 Maintenance	9/30/2006	\$1.63	9/30/2006	9/30/2006	\$1.63	\$1.607	0	\$0.023	100%
19	FY06 SS HPCS-3 Lease	9/30/2006	\$0	9/30/2008		\$3.675	\$0		\$0	0%
20	FY06 SS MSCF Operations	9/30/2006	\$2.44	9/30/2006	9/30/2006	\$2.44	\$2.229	0	\$0.211	100%

Exhibit 300: PNNL EMSL Molecular Science Computing Facility (MSCF) (Revision 13)

4. Comparison of Initial Baseline and Current Approved Baseline

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Milestone Number	Description of Milestone	Initial Baseline		Current Baseline				Current Baseline Variance		Percent Complete
		Planned Completion Date (mm/dd/yyyy)	Total Cost (\$M) Estimated	Completion Date (mm/dd/yyyy)		Total Cost (\$M)		Schedule (# days)	Cost (\$M)	
				Planned	Actual	Planned	Actual			
21	FY06 DME Archive Storage	9/30/2006	\$1	4/30/2006	4/30/2006	\$0.525	\$0.542	0	\$-0.017	100%
22	FY06 DME HPCS-2 Memory Upgrade		\$0	9/30/2006	11/17/2006	\$0.775	\$0.772	-48	\$-0.76425	1%
23	FY07 SS HPCS-3 Facility Prep	3/31/2007	\$0	3/31/2007		\$0.475	\$0.002		\$0.00275	1%
24	FY07 DME Lab Integration HPCS-3	9/30/2007	\$0.725	9/30/2007		\$0.915	\$0.437		\$0.0388	52%
25	FY07 SS HPCS-2 Maintenance	9/30/2007	\$0.818	9/30/2007		\$1.805	\$1.204		\$-0.0127	66%
26	FY07 SS HPCS-3 Maintenance	9/30/2007	\$0.5	9/30/2007		\$0	\$0		\$0	0%
27	FY07 DME HPCS-3 Lease	9/30/2007	\$6.74	9/30/2008		\$2.74	\$0		\$0	0%
28	FY07 SS MSCF Operations	9/30/2007	\$2.365	9/30/2007		\$2.34	\$1.565		\$-0.0206	66%
29	FY07 SS Archive Storage	9/30/2007	\$1	9/30/2007		\$0.5	\$0.004		\$0.001	1%
30	FY07 SS User Services		\$0	9/30/2007		\$1.3	\$0.707		\$0.151	66%