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:	2/19/2010
2. Agency:	Department of Energy
3. Bureau:	Energy Programs
4. Name of this Investment:	SC Lattice Quantum ChromoDynamics Computing (LQCD) - Direct Mission
5. Unique Project (Investment) Identifier: (For IT investment only, see section 53.9. For all other, use agency ID system.)	019-20-01-21-01-1032-00
6. What kind of investment will this be in FY 2011? (Please NOTE: Investments moving to O&M in FY 2011, with Planning/Acquisition activities prior to FY 2011 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?	FY2006

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; this description may include links to relevant information which should include relevant GAO reports, and links to relevant findings of independent audits.

The LQCD Computing Project is part of the DOE Office of Science (SC) High Energy Physics (HEP) & Nuclear Physics (NP) programs to enable scientific discovery through advanced scientific computing. QCD is the theoretical framework for large experimental programs in HEP & NP, and its properties can only be determined through large scale computer simulations. The LQCD Computing Project identified the need to dedicate hundreds of teraflop-years of sustained integrated computing power to the study of QCD, and other strongly coupled gauge theories expected to be of importance in the interpretation of experiments planned for the LHC. To achieve the FY10 capacity goal of 18 TF/s, the LQCD Project will utilize the QCDOC supercomputer located at the Brookhaven National Laboratory and the LQCD clusters located at the Fermi National Accelerator Laboratory and Thomas Jefferson National Accelerator Facility. These systems run physics applications built using optimized LQCD libraries developed by the SciDAC-1 and SciDAC-2 LQCD projects, funded by HEP, NP, and ASCR (Advanced Scientific Computing Research). In addition to providing highly optimized LQCD codes, the SciDAC-2 project is developing new algorithms that will further increase the cost effectiveness of the hardware acquired by this investment. This investment was scheduled to end in FY09. Due to management decision, the LQCD investment is being extended through FY2014. The investment provides funds for the acquisition and operation of new hardware, and for the operation of the existing QCDOC supercomputer and LQCD clusters through the end of their life cycle. In the coming year, DME funds will be used to purchase an additional 11 TF in compute capacity to support the study of QCD. The existing LQCD distributed cluster systems and supercomputers comply with the DOE technical architecture, as will all new hardware acquired in this investment. The computing resources provided by this investment continue to be heavily used by the USQCD scientific community to further the study of QCD and other strongly coupled gauge theories. Average capacity utilization across the metafacility was 91% (capacity-weighted average) over the past year. The allocation process for the coming year was recently completed and allocation requests once again exceeded available resources, attesting to the importance of this investment in providing compute facilities that scientists rely upon to make scientific progress.

a. Provide here the date of any approved rebaselining within the past year, the date for the most recent (or planned) alternatives analysis for this investment, and whether this investment has a risk management plan and risk register.	The Alternatives Analysis was updated August 6, 2009. This investment has an actively managed risk management plan and risk register; both documents are reviewed and updated at least quarterly. The risk management plan and risk register were last updated on August 7, 2009. The Total Project Cost for this investment occurs in fiscal years 2010 to 2014 and equals $11.8M.
9. Did the Agency's Executive/Investment Committee approve this request?	Yes
a. If "yes," what was the date of this approval?	1/21/2010
10. Contact information of Program/Project Manager?	
Name	Kogut, John B
Phone Number	301-903-1298

Email	john.kogut@science.doe.gov
11. What project management qualifications does the Project Manager have? (per FAC-P/PM)?	Project manager qualifications according to FAC-P/PM or DAWIA criteria is under review for this investment.

12. If this investment is a financial management system, then please fill out the following as reported in the most recent financial systems inventory (FMSI):			
OMB ID	**Financial management system name(s)**	**System Acronym**	**Unique Project Identifier (UPI) number**

a) If this investment is a financial management system AND the investment is part of the core financial system then select the primary FFMIA compliance area that this investment addresses (choose only one):	Not a core financial system; does not need to comply with FFMIA

Section B: Summary of Funding (Budget Authority for 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. Funding for all costs associated with the entire life-cycle of the investment should be included in this report. Funding levels should be shown for budget authority by year consistent with funding levels in Exhibit 53. The Summary of Funding table shall include the amounts allocated to the investment from, and should be directly tied to, the Fiscal Year Budget. This includes direct appropriations (discretionary or mandatory accounts), user fees, and approved self-funding activities and will provide the actual annual "budget" for the investment. This "budget" will be a subset of the congressionally approved budget for each fiscal year. This will provide Departments/Agencies and OMB useful information on the actual Fiscal Year dollars being asked for and spent on an investment.

SUMMARY OF FUNDING FOR PROJECT PHASES (REPORTED IN MILLIONS) (Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)									
	PY-1 and earlier	**PY 2009**	**CY 2010**	**BY 2011**	**BY+1 2012**	**BY+2 2013**	**BY+3 2014**	**BY+4 and beyond**	**Total**
Planning:	0.258	0.123	0.052	0.054	0.057	0.059	0.061	0	0.664
Acquisition:	5.072	0.675	1.887	1.997	2.203	2.825	2.627	0	17.286
Subtotal Planning & Acquisition:	5.330	0.798	1.939	2.051	2.260	2.884	2.688	0	17.950
Operations & Maintenance:	2.17	0.902	1.061	1.199	1.34	1.216	1.512	0	9.400
Disposition Costs (optional):	0	0	0	0	0	0	0	0	0
SUBTOTAL:	7.500	1.700	3.000	3.250	3.600	4.100	4.200	0	27.350
Government FTE Costs should not be included in the amounts provided above.									
Government FTE Costs	0.033	0.011	0.011	0.011	0.011	0.011	0.011	0	0.099
Number of FTE represented by Costs:	1	1	1	1	1	1	1	0	7
TOTAL (incl. FTE costs)	7.533	1.711	3.011	3.261	3.611	4.111	4.211	0	27.449

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.

Note 2: The two sub-total rows and total row will be calculated – not for data entry.

2. If the summary of funding has changed from the FY2010 President's Budget request, briefly explain those changes:

This investment was scheduled to end in FY09. Due to management decision, the LQCD investment is being extended through FY 2014 to continue the study of QCD, and other strongly coupled gauge theories. The summary of spending reflects this change and was initially updated based on preliminary budget guidance from the DOE Office of Science. The summary of spending table has been further updated in this submission to reflect refined budget guidance from the DOE SC Offices of High Energy and Nuclear Physics

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.

Contract/Task Orders Table * Costs in millions

Contract or Task Order Number	Type of Contract/Task Order (In accordance with FAR Part 16)	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)
Total Value of Expired Contracts	This is a summation of expired contracts. Guidance was provided by the DOE OCIO to remove expired contracts and sum the contracts in a single line item. The date 1/1/2000 was used because "blank" was not valid	Yes	1/1/2000	1/1/2000	1/1/2000	8.298	No	No	No	NA	No
Planned FY13 Cluster at FNAL	Firm-fixed Price	No	10/1/2012	10/1/2012	6/30/2013	2.884	No	Yes	Yes	NA	No
FNAL/TJNAF FY14 System Operations	Firm Fixed Price	No	10/1/2013	10/1/2013	9/30/2014	1.512	No	Yes	No	NA	Yes
Planned FY14 Cluster at FNAL	Firm-fixed Price	No	10/1/2013	10/1/2013	6/30/2014	2.688	No	Yes	Yes	NA	No
FNAL/TJNAF/BNL FY09 System Operations	Firm-fixed price	Yes	10/1/2008	10/1/2008	9/30/2009	0.902	No	Yes	No	NA	Yes
FNAL/TJNAF/BNL FY10 System Operations	Firm-fixed Price	Yes	10/1/2009	10/1/2009	9/30/2010	1.061	No	Yes	No	NA	Yes
Planned FY10 Cluster at FNAL	Firm-fixed Price	Yes	10/1/2009	10/1/2009	12/30/2010	1.939	No	Yes	Yes	NA	No
FNAL/TJNAF FY11 System Operations	Firm-fixed Price	No	10/1/2010	10/1/2010	9/30/2011	1.199	No	Yes	No	NA	Yes
Planned FY11 Cluster at FNAL	Firm-fixed Price	No	10/1/2010	10/1/2010	6/30/2011	2.051	No	Yes	Yes	NA	No
FNAL/TJNAF FY12 System Operations	Firm-fixed Price	No	10/1/2011	10/1/2011	9/30/2012	1.34	No	Yes	No	NA	Yes
Planned FY12 Cluster at TJNAF	Firm Fixed Price	No	10/1/2011	10/1/2011	6/30/2012	2.26	No	Yes	Yes	NA	No
FNAL/TJNAF FY13 System Operations	Firm Fixed Price	No	10/1/2012	10/1/2012	9/30/2013	1.261	No	Yes	No	NA	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:

The DOE has determined that this investment does not meet the criteria requiring EVM. Note for the Contracts/Task Orders Table listed above: The contracts listed as "Planned FYxx Cluster at FNAL" and "Planned FYxx Cluster at TJNAF" are subcontracts issued by the host laboratories that cover the purchase of computer hardware only. System integration and operation of this computer hardware are performed by the host laboratories. The host laboratories' M&O contracts include the required security and privacy clauses, and these requirements are satisfied by the laboratories' staff. The host laboratories' M&O contracts are performance-based contracts and include EVM per DOE Order 413.3.

3. Is there an acquisition plan which reflects the requirements of FAR Subpart 7.1 and has been approved in accordance with agency requirements?	Yes
a. If "yes," what is the date?	8/17/2009

NOTE: Data structure to be used to identify contract numbers in FPDS.

To assist in the linkage of Contract/Task Order Numbers from the Acquisition Strategy table to FPDS, agencies should provide the following information for "Contract/Task Order Numbers" based on the FPDS-NG data requirements (as specified in the FPDS-NG Data Element Dictionary- http://www.fpdsng.com/downloads/FPDS-Data-Dictionary-Version1.3.pdf):

Part of Indefinite Delivery Vehicle (IDV)?	Procurement Instrument Identifier	Example
Yes	Data Element 1A (NTE 50 characters)	"00063200203DNBCHC020042"
No	Data Element 1A, and the Referenced PIID, Data Element 1C (NTE 100 characters)	"GS09Q08DN0165-IDV-GS10F0216N"

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 and the relevant Agency Segment Architecture. The investment must discuss its performance measures in support of the agency's mission and strategic goals as outlined in the corresponding Segment Architecture. Performance measures (indicators) must be provided. 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 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.whitehouse.gov/omb/e-gov. The table can be extended to include performance measures for years beyond the next President's Budget.

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
	2007	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Customer Results	Customer Benefit	Customer Satisfaction	% of improvement in customer satisfaction rating (Customers rate satisfaction with the service provided on a scale of 1 to 10)	No initial baseline exists to form an originating baseline.	Complete user survey in order to establish baseline customer satisfaction rating.	82% A user survey was conducted in Aug/Sep 2007. Respondents reported an average customer satisfaction rating of 82%.	Not Met	Synchronize
	2007	GOAL 3.2 Foundations of Science	Customer Results	Service Coverage	New Customers and Market	Number of distinct users (includes	73 (Number of distinct users served	Increase to 25 (Based on projected	77 distinct users served in FY07	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.			Penetration	DOE labs, LQCD and academic communities)	by metafacility in FY06)	FY06 baseline of 20)			
	2007	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation	% of completed necessary improved staggered configurations enabling various physics studies of CKM matrix elements and hadron structure [SC Goals 4, 6] [NP-1]	40^3 x 96: 100% 48^3 x 144 (one quark mass): 50% 48^3 x 144 (second quark mass): 50%	Increase % of required generated lattices as follows:48^3 x 144 (one quark mass): 100% 48^3 x 144 (second quark mass): 100%	2 goals (1) generate 3k and 1875 equilibrated trajectories at quark mass M 61;0.4ms and M 61;0.2ms with lattice spacing 61;0.06 fm. 3K and 1875 generated. Milestone achieved.	Not Met	Synchronize
	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 Nations energy, national security, and environmental quality challenges.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation	Computer usage, in aggregate integrated TF-Yrs, applied to hybrid calculation of quark structure of nucleon in chiral regime [SC Goals 4, 6]	0.8 teraflops-year	Add an additional 1.0 TF-yrs of integrated usage to bring total to 1.8 teraflops-year	0.733 TF-yrs was devoted to this milestone in FY07.	Not Met	Synchronize
	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 Nations energy, national security, and	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation	Usage, in aggregate integrated TF-Yrs, for Pentaquark and N* spectroscopy calculations in the chiral regime [SC Goals 4, 6]	0.5 teraflops-year	Add an additional 0.75 TF-yrs of integrated usage to bring total to 1.25 teraflops-year	1.315 TF-yrs was devoted to this milestone in FY07.	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		environmental quality challenges.									
	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 Nations energy, national security, and environmental quality challenges.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation	Computer usage, in aggregate integrated TF-Yrs, applied to calculation of properties of hot hadronic and quark matter in chiral regime [SC Goals 5, 6]	1.0 teraflops-year	Add an additional 1.25 TF-yrs of integrated usage to bring the total to 2.25 teraflops-year	A calculation consuming 2.64 TF-yrs was performed during the course of FY2007, which exceeded the milestone.	Not Met	Synchronize
	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 Nations energy, national security, and environmental quality challenges.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation	% of required generated domain wall lattice configurations [SC Goals 4,6]	24^3 x 64 at one quark mass: 100%	24^3 x 64 at a second quark mass: 100% 32^3 x 64 at one quark mass: 25%	24^3 x 64 at a second quark mass: 100% 32^3 x 64 at one quark mass: 72%	Not Met	Synchronize
	2007	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation	% of completed improved staggered lattices analyzed for calculation of CKM matrix elements [SC Goals 4, 6] [NP-1]	40^3 x 96 lattices: 100%48^3 x 144 lattices: 0%	Increase percentage of 48^3 x 144 lattices analyzed to 100%	The CKM matrix calculation scientific priorities were changed with additional lattice configuration spacings 0.09 fermis before the 0.06 fm (48^3 x 144) configurations were started.	Not Met	Synchronize
	2007	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers,	Processes and Activities	Quality	Complaints	Increase % of tickets closed within 2 business days	Projected FY06 baseline: 85%	Increase to 90%	98%	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.									
	2007	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Quality	Errors	% reduction of delivered node hours consumed by jobs (BNL, JLAB, and TJNAF) with an error exit status.	14.5% (Baseline determined from FY06 data)	11.6% (Additional 20% reduction from baseline)	11%	Not Met	Synchronize
	2007	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Security and Privacy	Security	Increase the frequency of vulnerability scans on nodes visible from the Internet performed at each site	6 scans (In FY06 scans were performed every other month (total of 6 per year)	Increase rate of vulnerability scans by 100% to monthly (total of 12 per year)	12 scans	Not Met	Synchronize
	2007	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Aggregate computing resources provided by the project expressed as an average of the Asqtad and DWF algorithm performances in Tflops.	8.6 TF. (This capability allows the completion of the physics program planned for 2007.)	Increase to 11.5 TF (= 8.6+ 3.1 (new) - 0.2 (retired))This would establish sufficient capability for the planned 2008 physics program.	11.75 TF	Not Met	Synchronize
	2007	GOAL 3.2 Foundations of Science Deliver the scientific facilities,	Technology	Reliability and Availability	Availability	% of average machine uptime at the Meta-facility	88%	Increase to 92%	94%	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.									
	2008	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Customer Results	Customer Benefit	Customer Satisfaction	Additional % of improvement in customer satisfaction rating (Customers rate satisfaction with the service provided on a scale of 1 to 10)	Rating achieved from FY07 survey results. (estimated at 82%)	Additional 5% improvement over FY07 survey rating.	91%	Not Met	Synchronize
	2008	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Customer Results	Service Coverage	New Customers and Market Penetration	Number of distinct users of the facility (includes DOE labs, LQCD and academic communities)	25	Increase to 30	66	Not Met	Synchronize
	2008	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation	TF-Yrs delivered towards the completion of the 2008 Scientific Program	9.0 TF-Yrs delivered in FY07	Increase to 12.0 TF-Yrs delivered in FY08	12.1 TF-yrs delivered	Not Met	Synchronize
	2008	GOAL 3.2	Processes	Quality	Complaints	% of tickets	90%	Increase to	96%	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	and Activities			closed within 2 business days		92%			
	2008	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Quality	Errors	Percent of delivered node hours consumed by jobs with an error exit status.	Rating achieved during 2007	Additional 10% reduction from baseline	9%	Not Met	Synchronize
	2008	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Security and Privacy	Security	Increase the frequency of vulnerability scans on nodes visible from the Internet performed at each site	Monthly (total of 12 scans per year)	Increase frequency by 100% to biweekly (total of 24 scans per year)	Vulnerability scans are run daily at all three sites	Not Met	Synchronize
	2008	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Aggregate computing resources provided by the project expressed as an average of the Asqtad and DWF algorithm performances in Tflops.	11.5 TF This capability allows the completion of the physics program planned for 2008.	Increase to 15.6 TF (Additional 4.1)	15.6	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		for U.S. scientific primacy.									
	2008	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Technology	Reliability and Availability	Availability	% of average machine uptime at the Meta-facility	92%	Increase to 93%	96.3%	Not Met	Synchronize
	2009	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Customer Results	Customer Benefit	Customer Satisfaction	Additional % of improvement in customer satisfaction rating (Customers rate satisfaction with the service provided on a scale of 1 to 10)	91% (Rating achieved from FY08 survey.)	5% improvement over FY08 survey rating.	Milestone achieved- 96% overall satisfaction rating	Not Met	Synchronize
	2009	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Customer Results	Service Coverage	New Customers and Market Penetration	Number of distinct users of the facility (includes DOE labs, LQCD and academic communities)	66	Increase to 70	Milestone achieved- Total number of distinct users = 92.	Not Met	Synchronize
	2009	GOAL 3.1 Scientific Breakthroughs - Achieve the major scientific discoveries that will drive U.S. competitiveness; inspire America; and revolutionize	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation	TF-Yrs delivered towards the completion of the 2009 Scientific Program	12.0 TF-Yrs	Increase to 15.0 TF-Yrs	Milestone achieved - 17.95 TF-yrs delivered Performance goal exceeded.	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		approaches to the Nation s energy, national security, and environmental quality challenges.									
	2009	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Quality	Complaints	% of tickets closed within 2 business days	92%	Increase to 95%	94% Within 1% of performance goal	Not Met	Synchronize
	2009	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Quality	Errors	% reduction of delivered node hours consumed by jobs (BNL, JLAB, and TJNAF) with an error exit status.	Rating achieved during FY08	Additional 10% reduction from baseline	8.65%.	Not Met	Synchronize
	2009	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Security and Privacy	Security	Increase the frequency of vulnerability scans on nodes visible from the Internet performed at each site	Biweekly scans (total of 24 per year)	100% to weekly scans (total of 52 scans per year)	Milestone Achieved - Daily scans performed at all sites. Performance goal exceeded.	Not Met	Synchronize
	2009	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Aggregate computing resources provided by the project expressed as an average of the Asqtad	11.9 TF	Increase to 15.7 TF	Milestone Achieved - 19.6 TF Performance goal exceeded.	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.				and DWF algorithm performances in Tflops.					
	2009	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Technology	Reliability and Availability	Availability	% of average machine uptime at the Meta-facility	93%	Increase to 95%	Milestone Achieved - 98%. Performance goal exceeded.	Not Met	Synchronize
	2010	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Customer Results	Customer Benefit	Customer Satisfaction	Customer satisfaction rating (Customers rate satisfaction with the service provided on a scale of 1 to 10)	92%	≥92%	Available in Q1 FY11. On target to achieve goal.	Not Met	Synchronize
	2010	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation	TF-Yrs delivered towards the completion of the 2010 Scientific Program	17.0 TF-Yrs	Increase to 18.0 TF-Yrs	Available in Q1 FY11. On target to achieve goal.	Not Met	Synchronize
	2010	GOAL 3.2 Foundations of Science	Processes and Activities	Quality	Complaints	% of tickets closed within 2 business	95%	≥95%	Available in Q1 FY11. On target to	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.				days			achieve goal.		
	2010	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Security and Privacy	Security	Frequency of vulnerability scans performed at each site on nodes visible from the Internet	Weekly vulnerability scans (total of 52 per year)	Vulnerability scans performed at least weekly at each host site (minimum of 52 scans per year per site)	Available in Q1 FY11. On target to achieve goal.	Not Met	Synchronize
	2010	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Technology	Reliability and Availability	Availability	% of average machine uptime at the Meta-facility	95%	≥95%	Available in Q1 FY11. On target to achieve goal.	Not Met	Synchronize
	2011	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific	Customer Results	Customer Benefit	Customer Satisfaction	Customer satisfaction rating (Customers rate satisfaction with the service provided on a scale of 1 to 10)	92%	≥92%	Available in Q1 FY12	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		primacy.									
	2011	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation	TF-Yrs delivered towards the completion of the 2011 Scientific Program	18.0 TF-Yrs	Increase to 22.0 TF-Yrs	Available in Q1 FY12	Not Met	Synchronize
	2011	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Quality	Complaints	% of tickets closed within 2 business days	95%	≥95%	Available in Q1 FY12	Not Met	Synchronize
	2011	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Security and Privacy	Security	Frequency of vulnerability scans performed at each site on nodes visible from the Internet	Weekly vulnerability scans (total of 52 per year)	Vulnerability scans performed at least weekly at each host site (minimum of 52 scans per year per site)	Available in Q1 FY12	Not Met	Synchronize
	2011	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Additional computing resources deployed by the project, expressed as an average of the Asqtad and DWF algorithm performances in Tflops.	23 TF	≥23 TF.	Available in Q1 FY12	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		and infrastructure required for U.S. scientific primacy.									
	2011	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Technology	Reliability and Availability	Availability	% of average machine uptime at the Meta-facility	95%	≥95%	Available in Q1 FY12	Not Met	Synchronize
	2012	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Customer Results	Customer Benefit	Customer Satisfaction	Customer satisfaction rating (Customers rate satisfaction with the service provided on a scale of 1 to 10)	92%	≥92%	Available in Q1 FY13	Not Met	Synchronize
	2012	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation	TF-Yrs delivered towards the completion of the 2012 Scientific Program	22.0 TF-Yrs	Increase to 34.0 TF-Yrs	Available in Q1 FY13	Not Met	Synchronize
	2012	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and	Processes and Activities	Quality	Complaints	% of tickets closed within 2 business days	95%	≥95%	Available in Q1 FY13	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.									
	2012	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Security and Privacy	Security	Frequency of vulnerability scans performed at each site on nodes visible from the Internet	Weekly vulnerability scans (total of 52 per year)	Vulnerability scans performed at least weekly at each host site (minimum of 52 scans per year per site)	Available in Q1 FY13	Not Met	Synchronize
	2012	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Additional computing resources deployed by the project, expressed as an average of the Asqtad and DWF algorithm performances in Tflops.	24 TF	≥24 TF	Available in Q1 FY13	Not Met	Synchronize
	2012	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Technology	Reliability and Availability	Availability	% of average machine uptime at the Meta-facility	95%	≥95%	Available in Q1 FY13	Not Met	Synchronize
	2013	GOAL 3.2 Foundations of Science Deliver the scientific	Customer Results	Customer Benefit	Customer Satisfaction	Customer satisfaction rating (Customers rate	92%	≥92%	Available in Q1 FY14	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.				satisfaction with the service provided on a scale of 1 to 10)					
	2013	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation	TF-Yrs delivered towards the completion of the 2013 Scientific Program	34.0 TF-Yrs	Increase to 52.0 TF-Yrs	Available in Q1 FY14	Not Met	Synchronize
	2013	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Quality	Complaints	% of tickets closed within 2 business days	95%	≥95%	Available in Q1 FY14	Not Met	Synchronize
	2013	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Security and Privacy	Security	Frequency of vulnerability scans performed at each site on nodes visible from the Internet	Weekly vulnerability scans (total of 52 per year)	Vulnerability scans performed at least weekly at each host site (minimum of 52 scans per year per site	Available in Q1 FY14	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
	2013	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Additional computing resources deployedby the project, expressed as an average of the Asqtad and DWF algorithm performances in Tflops.	44 TF	≥44 TF	Available in Q1 FY14	Not Met	Synchronize
	2013	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Technology	Reliability and Availability	Availability	% of average machine uptime at the Meta-facility	95%	≥95%	Available in Q1 FY14	Not Met	Synchronize
	2014	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Customer Results	Customer Benefit	Customer Satisfaction	Customer satisfaction rating (Customers rate satisfaction with the service provided on a scale of 1 to 10)	92%	≥92%	Available in Q1 FY15	Not Met	Synchronize
	2014	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructur	Mission and Business Results	General Science and Innovation	Scientific and Technological Research and Innovation	TF-Yrs delivered towards the completion of the 2014 Scientific Program	52.0 TF-Yrs	Increase to 90.0 TF-Yrs	Available in Q1 FY15	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		e required for U.S. scientific primacy.									
	2014	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Quality	Complaints	% of tickets closed within 2 business days	95%	≥95%	Available in Q1 FY15	Not Met	Synchronize
	2014	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Processes and Activities	Security and Privacy	Security	Frequency of vulnerability scans performed at each site on nodes visible from the Internet	Weekly vulnerability scans (total of 52 per year)	Vulnerability scans performed at least weekly at each host site (minimum of 52 scans per year per site)	Available in Q1 FY15	Not Met	Synchronize
	2014	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide the laboratory capabilities and infrastructure required for U.S. scientific primacy.	Technology	Effectiveness	IT Contribution to Process, Customer, or Mission	Additional computing resources deployed by the project, expressed as an average of the Asqtad and DWF algorithm performances in Tflops.	57 TF	≥57 TF	Available in Q1 FY15	Not Met	Synchronize
	2014	GOAL 3.2 Foundations of Science Deliver the scientific facilities, train the next generation of scientist and engineers, and provide	Technology	Reliability and Availability	Availability	% of average machine uptime at the Meta-facility	95%	≥95%	Available in Q1 FY15	Not Met	Synchronize

Performance Information Table

OMB ID	Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results	Rating	Include In OMB Dashboard
		the laboratory capabilities and infrastructure required for U.S. scientific primacy.									

Section E: Security (IT Capital Assets only)

For IT investments, agencies should maintain up-to-date tracking of which systems in the FISMA inventory support any IT investment. Linking major IT investments to FISMA systems will be addressed outside the context of the A-11 budget submission of the Exhibit 300.

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.

Have the requisite investment-level architecture documentation requirements (e.g., reference model mappings, FTF mappings, etc.) for this investment been documented in the corresponding Segment Architecture? For detailed guidance regarding segment architecture requirements, please refer to www.whitehouse.gov/omb/e-gov. See this guidance also regarding the reporting of six digit codes corresponding to agency segment architectures in Exhibit 53, and, for limited cases determined by the Chief Architect, reporting an investment alignment with multiple segments.	Yes

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

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.

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

Agencies should be measuring the performance of operational assets against the baseline established during the planning or full acquisition phase (i.e., operational analysis), or, where approved, the current baseline, and be properly operating and maintaining the asset to maximize its useful life. Operational analysis may identify the need to redesign or modify an asset by identifying previously undetected faults in design, construction, or installation/integration, highlighting whether actual operation and maintenance costs vary significantly from budgeted costs, or documenting that the asset is failing to meet program requirements.

EVM is required only on Planning or Acquisitions portions of investments. For mixed lifecycle investments, O&M milestones should still be included in the cost and schedule performance table This table should accurately reflect the milestones in the initial baseline, or approved current baseline.

For investments including Planning or Acquisitions spending, complete the following table on milestones used to measure cost and schedule performance, representing only one level of the investment's Work Breakdown Structure. This should generally show Level 3 of the Work Breakdown Structure. For activities related to Operations and Maintenance included in Mixed Life Cycle investments, provide milestones used to track cost and schedule performance in the same format used for development activities milestones.

1. Comparison of Actual Work Completed and Actual Costs to Current Approved Baseline:

Complete the following table to compare actual performance against the current 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"), baseline and actual start dates, and the baseline and actual total costs (in $ Millions). Note that the 'Description of Milestone' and 'Percent Completed'-both Planned and Actual-fields are required.

This table represents milestones at Work Breakdown Structure level 1

Description of Milestone	Total Cost		Baseline (mm/dd/yyyy)				Percentages Complete	
	Planned Cost ($M)	Actual Cost ($M)	Start Date		Completion Date		Planned	Actual
			Planned	Actual	Planned	Actual		
FY06 DME Computer architecture planning for FY07 complete and reviewed by external DOE committee (Table I.C.1 line 1)	$0.030000	$0.030000	10/1/2005	10/1/2005	6/30/2006	5/26/2006	100%	100%
FY06 DME Initial (submission in 2004): Procurement and deployment of 1.8 teraflops (sustained) system at either FNAL or TJNAF. Current: Procurement and deployment of FY06 system at FNAL totaling 1.8 teraflops (sustained) (Table I.C.1 line 1)	$1.565000	$1.508000	10/1/2005	10/1/2005	9/30/2006	9/30/2006	100%	100%
FY06 DME Procurement and deployment of FY06 system at TFNAF totaling 0.2 teraflops (sustained) (Table I.C.1 line 1)	$0.280000	$0.290000	10/1/2005	10/1/2005	6/30/2006	5/1/2006	100%	100%
FY06 SS 7 Teraflops-years computing delivered to LQCD community. Current: 6.2 TFlops-years computing delivered to LQCD community (Table I.C.1 lines 1)	$0.625000	$0.602000	10/1/2005	10/1/2005	9/30/2006	10/7/2006	100%	100%
FY07 DME Computer architecture planning for the FY08 procurement complete and reviewed by external DOE committee. (Table I.C.1 line 1)	$0.030000	$0.030000	10/1/2006	10/1/2006	6/30/2007	5/15/2007	100%	100%
FY07 DME Procurement and deployment of 2.2 teraflops (sustained) system at either FNAL or TJNAF. Current: Procurement and deployment of FY07 system at TJNAF totaling 2.9 teraflops (sustained) (Table I.C.1 line 1)	$1.676000	$1.503000	10/1/2006	10/1/2006	12/30/2007	10/17/2007	100%	100%
FY07 SS Teraflops-years aggregate computing delivered to LQCD community (Table I.C.1 line 1)	$0.704000	$0.886000	10/1/2006	10/1/2006	9/30/2007	9/30/2007	100%	100%
FY07 SS Security controls and contingency plan testing complete at FNAL, BNL and TJNAF. (Table 1.C.1 line 1)	$0.090000	$0.050000	10/1/2006	10/1/2006	8/31/2007	8/31/2007	100%	100%
FY08 DME Computer architecture planning for the FY09 procurement complete and reviewed by external DOE committee. (Table I.C.1 line 1)	$0.030000	$0.030000	10/1/2007	10/1/2007	6/30/2008	5/14/2008	100%	100%
FY08 DME Initial (FY04 submission): Procurement and deployment of 3 TFP (sustained) system at either FNAL or TJNAF. Current FY09: Procurement and deployment of 4.2 TFP at FNAL (Table 1.C.1 line 1)	$1.719000	$1.719000	10/1/2007	10/1/2007	12/30/2008	1/5/2009	100%	100%
FY08 DME Evaluate costs for operations of LQCD hardware for FY10 forward for a new project proposal or for extension of this project (Table 1.C.1 line 1)	$0.000000	$0.070000	10/1/2007	10/1/2007	9/30/2008	3/3/2008	100%	100%
FY08 SS Teraflops-years aggregate computing delivered to LQCD community (Table I.C.1 line 1)	$0.661000	$0.670000	10/1/2007	10/1/2007	9/30/2008	9/30/2008	100%	100%
FY08 SS Security controls and contingency plan testing	$0.090000	$0.030000	10/1/2007	10/1/2007	8/31/2008	8/31/2008	100%	100%

1. Comparison of Actual Work Completed and Actual Costs to Current Approved Baseline:

Complete the following table to compare actual performance against the current 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"), baseline and actual start dates, and the baseline and actual total costs (in $ Millions). Note that the 'Description of Milestone' and 'Percent Completed'-both Planned and Actual-fields are required.

This table represents milestones at Work Breakdown Structure level 1

Description of Milestone	Total Cost		Baseline (mm/dd/yyyy)				Percentages Complete	
	Planned Cost ($M)	Actual Cost ($M)	Start Date		Completion Date		Planned	Actual
			Planned	Actual	Planned	Actual		
complete at FNAL, BNL and TJNAF. (Table 1.C.1 line 1)								
FY09 DME Computer architecture planning for the FY10 procurement complete and reviewed by external DOE committee. (Table I.C.1 line 1)	$0.000000	$0.000000	10/1/2008	10/1/2008	6/30/2009	6/5/2009	100%	100%
FY09 DME Initial (submission in 2004): Procurement and deployment of 4.5 teraflops (sustained) system at either FNAL or TJNAF. Current: Procurement and deployment of 2.0 teraflops (sustained) at FNAL (Table 1.C.1 line 1)	$0.798000	$0.728000	10/1/2008	12/2/2008	6/30/2009	7/2/2009	100%	100%
FY09 SS Teraflops-years aggregate computing delivered to LQCD community (Table I.C.1 line 2)	$0.812000	$0.734000	10/1/2008	10/1/2008	9/30/2009	9/30/2009	100%	100%
FY09 SS Security controls and contingency plan testing complete at FNAL, BNL and TJNAF. (Table 1.C.1 line 1)	$0.090000	$0.071000	10/1/2008	10/1/2008	9/30/2009	9/30/2009	100%	100%
FY10 DME Computer architecture planning for the FY11 procurement complete and reviewed by external DOE committee. (Table I.C.1 line 4)	$0.052000	$0.006000	10/1/2009	1/4/2010	6/30/2010		33%	33%
FY10 DME Procurement and deployment of 11 teraflops (sustained) at Fermilab (Table 1.C.1 line 4)	$1.887000	$0.000000	10/1/2009		12/31/2010		0%	0%
FY10 SS 18.0 Teraflops-years aggregate computing delivered to LQCD community (Table I.C.1 line 3)	$1.061000	$0.152000	10/1/2009	10/1/2009	9/30/2010		42%	42%
FY10 SS Security controls testing and contingency plan review complete at FNAL, BNL and TJNAF. (Table 1.C.1 line 1)	$0.000000	$0.000000	10/1/2009	10/1/2009	8/31/2010		45%	45%
FY11 DME Procurement and deployment of 12.0 teraflops (sustained) at Fermilab in FY11. (Table 1.C.1 line 5)	$1.997000	$0.000000	10/1/2010		6/30/2011		0%	0%
FY11 DME Computer architecture planning for the FY12 procurement complete and reviewed by external DOE committee. (Table I.C.1 line 7)	$0.054000	$0.000000	10/1/2010		9/30/2011		0%	0%
FY11 SS 22.0 Teraflops-years aggregate computing delivered to LQCD community (Table I.C.1 line 6)	$1.199000	$0.000000	10/1/2010		9/30/2011		0%	0%
FY11 SS Security controls testing and contingency plan review complete at FNAL, BNL and TJNAF (Table 1.C.1 line 1)	$0.000000	$0.000000	10/1/2010		8/31/2011		0%	0%
FY12 DME Procurement and deployment of 24.0 teraflops (sustained) at TJNAF (Table 1.C.1 line 7)	$2.203000	$0.000000	10/1/2011		6/30/2012		0%	0%
FY12 DME Computer architecture planning for the FY13 procurement complete and reviewed by external DOE committee. (Table I.C.1 line 9)	$0.057000	$0.000000	10/1/2011		6/30/2012		0%	0%

1. Comparison of Actual Work Completed and Actual Costs to Current Approved Baseline:

Complete the following table to compare actual performance against the current 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"), baseline and actual start dates, and the baseline and actual total costs (in $ Millions). Note that the 'Description of Milestone' and 'Percent Completed'-both Planned and Actual-fields are required.

This table represents milestones at Work Breakdown Structure level 1

Description of Milestone	Total Cost		Baseline (mm/dd/yyyy)				Percentages Complete	
	Planned Cost ($M)	Actual Cost ($M)	Start Date		Completion Date		Planned	Actual
			Planned	Actual	Planned	Actual		
FY12 SS 34.0 Teraflops-years aggregate computing delivered to LQCD community (Table I.C.1 line 10)	$1.340000	$0.000000	10/1/2011		9/30/2012		0%	0%
FY12 SS Security controls testing and contingency plan review complete at FNAL, BNL and TJNAF. (Table 1.C.1 line 8)	$0.000000	$0.000000	10/1/2011		8/31/2012		0%	0%
FY13 DME Procurement and deployment of 44.0 teraflops (sustained) at Fermilab (Table 1.C.1 line 9)	$2.825000	$0.000000	10/1/2012		6/30/2013		0%	0%
FY13 DME Computer architecture planning for the FY14 procurement complete and reviewed by external DOE committee. (Table I.C.1 line 11)	$0.059000	$0.000000	10/1/2012		6/30/2013		0%	0%
FY13 SS 52.0 Teraflops-years aggregate computing delivered to LQCD community during FY13. (Table I.C.1 line 10)	$1.216000	$0.000000	10/1/2012		9/30/2013		0%	0%
FY13 SS Security controls testing and contingency plan review complete at FNAL, BNL and TJNAF. (Table 1.C.1 line 10)	$0.000000	$0.000000	10/1/2012		8/31/2013		0%	0%
FY14 DME Procurement and deployment of 57.0 teraflops (sustained) at Fermilab (Table 1.C.1 line 11)	$2.688000	$0.000000	10/1/2013		6/30/2014		0%	0%
FY14 SS 90.0 Teraflops-years aggregate computing delivered to LQCD community (Table I.C.1 line 12)	$1.512000	$0.000000	10/1/2013		9/30/2014		0%	0%
FY14 SS Security controls testing and contingency plan review complete at FNAL, BNL and TJNAF. (Table 1.C.1 line 12)	$0.000000	$0.000000	10/1/2013		8/31/2014		0%	0%
Project Totals	**$27.350000**	**$9.108000**	**10/1/2005**	**10/1/2005**	**9/30/2014**		**35.33%**	**35.33%**