

Certification and Accreditation Documentation
for the
SC Lattice QCD Computing Project (LQCD)

Operated at
Brookhaven National Laboratory
Fermi National Accelerator Laboratory
Thomas Jefferson National Accelerator Facility


for the
U.S. Department of Energy
Office of Science
Offices of High Energy and Nuclear Physics

April 10, 2008

Revision 1.0

PREPARED BY:
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CONCURRENCE:



William N. Boroski
LQCD Contractor Project Manager

4-10-2008
Date

**LQCD Certification and Accreditation Documentation
Change Log**

Revision No.	Description / Pages Affected	Effective Date
Revision 0.0	Entire document.	August 17, 2007
Revision 1.0	Updated Fermilab and Jefferson Lab Authority to Operate documentation.	April 10, 2008

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1. SCOPE AND PURPOSE

This document contains Certification and Accreditation (C&A) documentation for the SC Lattice Quantum Chromodynamics Computing Project (LQCD). Specifically, this document contains copies of the cover pages, with signatures, for Computer Security Authority to Operate (ATO) documents issued by the U.S. Department of Energy (DOE) to the three sites hosting LQCD computing facilities. These include Brookhaven National Laboratory, Fermi National Accelerator Laboratory, and Thomas Jefferson National Accelerator Facility.

Complete sets of ATO documentation are maintained at the three operating sites and are available upon request.

2. PLAN OF ACTION AND MILESTONES

In addition to maintaining current ATO documentation, each operating site maintains Plan of Action and Milestones (POAM) spreadsheets provided by the Office of Science. These POAMs are used to collect and track individual findings from various audits, with milestones. On a quarterly basis, the POAM sheets are updated and provided along with the FISMA reports to the Office of Science. POAM management is handled by the cyber security staff at each of the three sites.

3. DOE AUTHORITY TO OPERATE DOCUMENTS

The following sections contain copies of current C&A documentation for the three host laboratories.

3.1. Brookhaven National Laboratory



Department of Energy
Brookhaven Site Office
P.O. Box 5000
Upton, New York 11973

CC Number: CC2007-3141
Director: Aronson, S
Due: Rec'd: 1/31/2007
PDF File Name: CC2007-3141-ID.pdf
Concurrence: Not Required
Actionee:
Actionee Due Date:

JAN 30 2007

Dr. Samuel H. Aronson, Director
Brookhaven Science Associates, LLC
Brookhaven National Laboratory
Upton, New York 11973

Dear Dr. Aronson:

SUBJECT: ACCREDITATION DECISION LETTER (GRANTING AN AUTHORITY TO OPERATE)

The Department of Energy (DOE) is granting Brookhaven National Laboratory (BNL) an authority to operate their unclassified information systems. BNL has conducted a certification and accreditation in accordance with DOE and Office of Science processes. The threats and risks have been analyzed, plans developed, and controls implemented to mitigate risks to an acceptable level. After reviewing the results of the independent Security Test and Evaluation (ST&E) which was conducted by SAIC as well as the results of certification and accreditation process for BNL information systems, it has been determined that the cyber security risk to the agency's information and information systems is acceptable. Accordingly, the information systems are authorized to operate in its existing environment. This full approval to operate is valid for a three (3) year period.

The accreditation will remain in effect subject to the following conditions:

1. BNL will continue to mitigate vulnerabilities and risks identified in their Plan of Action and Milestones in accordance with the schedule presented. Additional actions stemming from the ST&E must also be mitigated in a timely fashion.
2. BNL will continuously monitor their cyber security posture. Threats and vulnerabilities identified and reported during the continuous monitoring process must be addressed within their required timeframe and/or do must result in increased risks to the enclave/system, Laboratory or DOE assets.
3. BNL will assess their security posture to ensure that there are no significant changes in the environment, technology or operations that would constitute increased risk. The certification and accreditation is a living process that must be maintained, risk acknowledged, and risk mitigated to acceptable levels.

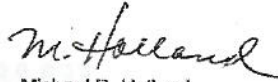
Dr. Aronson

-2-

JAN 30 2007

If you have any questions, please contact Frank Crescenzo, Deputy Site Manager at extension 3433.

Sincerely,



Michael D. Holland
Site Manager
Designated Approving Authority

cc: G. Malosh, SC-3, FORS
M. Robertson, SC-33, GTN
D. Streit, SC-1.1, FORS
F. Crescenzo, SC-BHSO
R. Diem, SC-BHSO
F. Healy, SC-CH
T. Schlagel, BSA
K. Lally, BSA

3.2. Fermi National Accelerator Laboratory

FEB 28 2008

Dr. Victoria A. White
Computer Security Executive
Fermilab
P. O. Box 500
Batavia, Illinois 60510-0500

Dear Dr. White:

**SUBJECT: FERMI NATIONAL ACCELERATOR LABORATORY'S (FERMILAB'S)
COMPUTER SECURITY AUTHORITY TO OPERATE**

References: 1) Letter, V. White to J. Livengood, dated 1/29/08
2) Letter, R. Cudzewicz to F. Healy, dated 1/30/08, Subject: OnPoint ST&E
Assessment Results; Remote Access Finding Resolved

Based on our review and the Security Test and Evaluation (ST&E) review of the documentation that you provided and your response to the review findings, I am granting Fermilab's Computer Security Authority to Operate. In particular, you have committed to addressing the eleven review findings as Plan of Action and Milestones (POA&Ms) scheduled to be completed by July 10, 2008. We understand that interim actions have been taken to address the POA&Ms and that the broader actions are being addressed.

Enclosed are:

- 1) A signed copy of each of the six packages accepting residual risk for each of the enclaves and major applications.
- 2) Six signed memos, each granting an Authority to Operate for the period February 28, 2008 through February 27, 2011, for the enclaves and major applications.

Sincerely,
Original Signed by
Dr. Joanna M. Livengood
Site Manager

Dr. Joanna M. Livengood
Site Manager

Enclosures:
As Stated

cc: C. Woods, SC-31.3, w/o encls.
P. Oddone, Fermilab, w/o encls.
Y.-K. Kim, Fermilab, w/o encls.
H. Montgomery, Fermilab, w/o encls.
B. Chrisman, Fermilab, w/o encls.
M. Leininger, Fermilab, w/o encls.

3.3. Thomas Jefferson National Accelerator Facility



Department of Energy
Thomas Jefferson Site Office
12000 Jefferson Avenue
Newport News, Virginia 23606

October 10, 2007

Dr. Christoph W. Leemann
President and Laboratory Director
Jefferson Science Associates, LLC
Thomas Jefferson National Accelerator Facility
12000 Jefferson Avenue
Newport News, VA 23606

Dear Dr. Leemann:

ACCREDITATION DECISION LETTER (GRANTING AN AUTHORITY TO OPERATE)

Jefferson Lab has completed the certification of the cyber security programs for its ten computing enclaves in accordance with DOE and Office of Science direction and guidance. The cyber security threats and risks have been analyzed, plans developed, and controls implemented to mitigate risks to an acceptable level.

After reviewing the results of the independent Security Test and Evaluation (ST&E), which was conducted by OnPoint, the Plans of Action and Milestones, and the certification documents, I have determined that the residual risk to the agency's information and information systems is acceptable and have accredited the cyber security program for the ten enclaves. Accordingly, the information systems are authorized to operate in the existing operating environment.

The Department of Energy (DOE) hereby grants Thomas Jefferson National Accelerator Facility the authority to operate its ten computing enclaves. This full approval to operate is valid for a three (3) year period; I am extending your authority without any significant restrictions or limitations to operate to October 10, 2010.

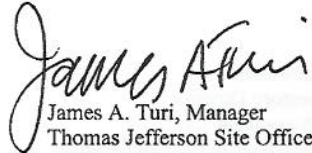
The accreditation will remain in effect subject to the following conditions:

1. JLab will continue to mitigate vulnerabilities and risks identified in its Plans of Action and Milestones in accordance with the schedule presented.
2. JLab will continuously monitor its cyber security posture. Threats and vulnerabilities identified and reported during the continuous monitoring process must be mitigated promptly or be addressed by new items posted in the Plans of Actions and Milestones.
3. JLab will assess its security posture to ensure that there are no significant changes in the environment, technology or operations that would constitute increased risk. The C&A is a living process that must be maintained, with risks acknowledged and mitigated to acceptable levels.

4. JLab will inform the DAA of any significant changes in the Lab's risk posture or in the structure of the program to allow a determination of the continuing authority to operate. If a significant change to an enclave(s) occurs, a new risk assessment for applicable enclave (s) would be submitted to the DAA for determination of continued operation.

If there are any questions, please contact either André Bethea at extension 5095 or me.

Sincerely,


James A. Turi, Manager
Thomas Jefferson Site Office

Enclosure:

- Copies of the following (10) signed documents:
- Acceptance of Residual Risk - Accelerator Controls Enclave
 - Acceptance of Residual Risk - Business Administration Enclave
 - Acceptance of Residual Risk - Collaborative Computing Enclave
 - Acceptance of Residual Risk - Core Services Enclave
 - Acceptance of Residual Risk - Desktop Support Enclave
 - Acceptance of Residual Risk - Experimental Physics Enclave
 - Acceptance of Residual Risk - Free Electron Laser Enclave
 - Acceptance of Residual Risk - Guest Services Enclave
 - Acceptance of Residual Risk - Public Services Enclave
 - Acceptance of Residual Risk - Scientific Computing Enclave

AR:ATO Ltr_2008:10/9/2007:703

APPENDIX A: Acronyms

ATO	Authority to Operate
C&A	Certification and Accreditation
LQCD	Lattice Quantum Chromodynamics
POAM	Plan of Action and Milestones

