Addendum to the
Project Execution Plan
for the
SC Lattice QCD Computing Project Extension II
(LQCD-ext II)

Unique Project (Investment) Identifier: 019-20-01-21-02-1032-00

Operated at
Brookhaven National Laboratory
Fermi National Accelerator Laboratory
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for the
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Proposal Change Log

Revision No.	Description / Pages Affected	Effective Date
0.1	Initial Draft covering: Site Architect role, and proposed transition plan for incorporating this into PEP. (This draft does not yet include proposed Communication Plan.)	6/16/2015
0.5	Updated draft taking initial IPT feedback into consideration	7/7/2015
0.9	Updated given more IPT feedback	7/9/2015
1.0	Include Appendix B update to JLab CIO. Remove DRAFT label.	8/5/2015

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1   INTRODUCTION

This document introduces a new role, Site Architect, to the LQCD-ext II Computing Project's Project Execution Plan that takes on a subset of the Site Manager's responsibilities. This documents also adds a few strategic communications touch points.

WHAT and WHY:
- Formalize key touch points to improve consistency of communications across sites, especially for acquisition planning.
- Document the Site Architect role in order to capture the different organizational approaches used at different sites. Addition of the new role identifies responsibility for hardware architecture and performance benchmarks and related communication for each site, and allows the project to strengthen succession planning.

HOW and WHEN:
- Develop an informal proposal for the Site Architect role now that works within existing PEP. This is possible because the Site Architect role takes on a subset of the Site Manager role. During this period, Site Managers delegate the specific responsibilities in the proposal to Acting Site Architects. Also, develop a proposal for additional project communications touch points, taking the new role into account. This augments the description of interactions already listed in the PEP.
- After these proposals are used and then refined, at least for acquisition planning, exercise Project Change Control to formally add them as an addendum to PEP. Acting Site Architects formally become Site Architects. We also add the Site Architect role to the project succession plan at this point.
- At an appropriate time afterwards, formally integrate the addendum into the PEP and execute sign-off on a new PEP version.

5 MANAGEMENT STRUCTURE AND INTEGRATED PROJECT TEAM

The organization chart for the management and oversight of the LQCD-ext II project is shown in Figure 1. Solid lines indicate reporting relationships; dashed lines represent advisory relationships.
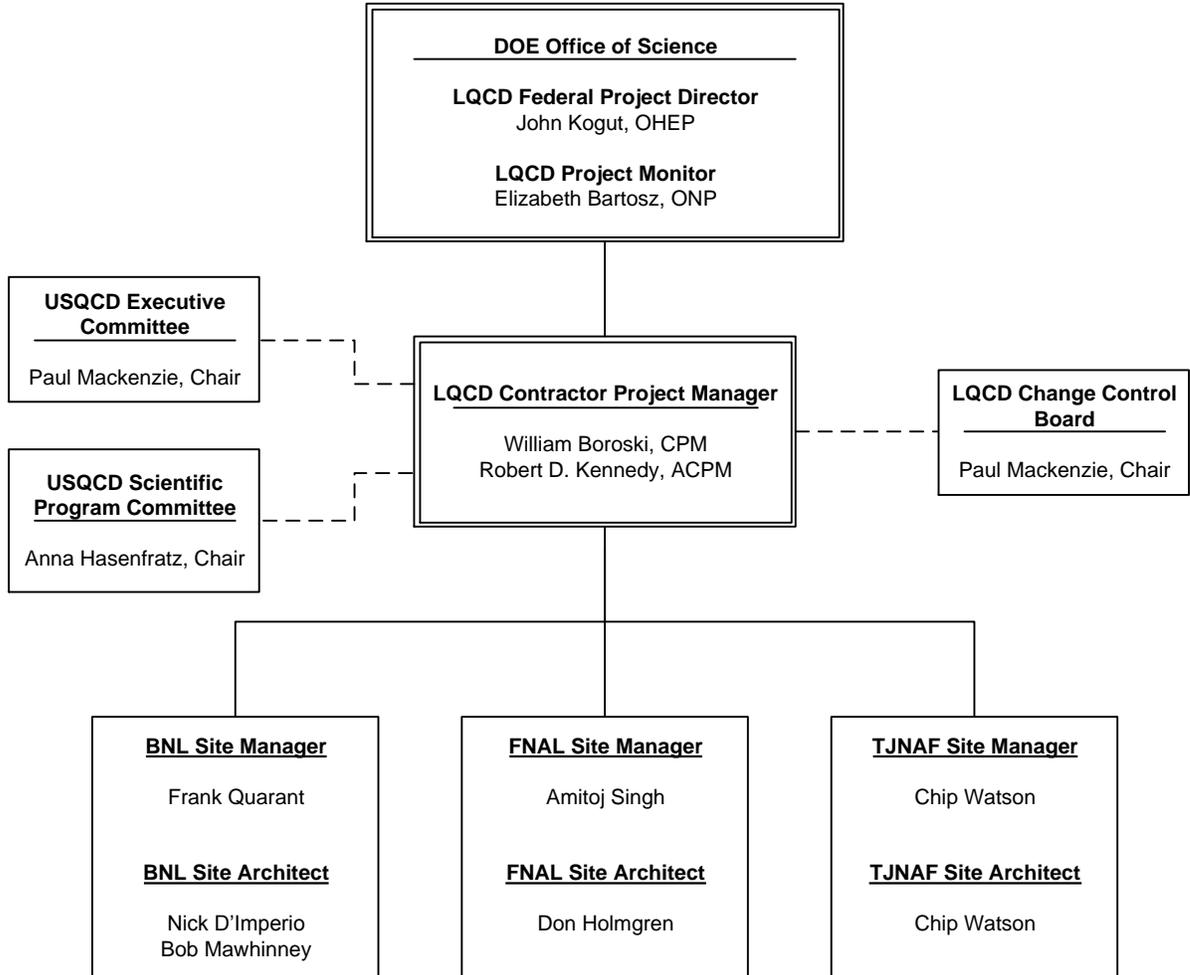

Figure 1: Management Organization Chart for the LQCD-ext II Computing Project

5.1 Roles and Responsibilities

5.1.4 Site Managers

Site Manager (SM) responsibilities are as described in the LQCD-ext II PEP v1.1 except:
- The Site Manager no longer leads the hardware selection process for deployments at his/her site. The SM continues to participate in the hardware selection process representing their host laboratory facilities and operations capabilities.
- The Site Manager leads the hardware deployment activities as before.
- The Site Manager is the primary interface between the CPM and their host laboratory as before.

Site Manager Interactions remained as described in the LQCD-ext II PEP v1.1, reproduced here:
Interactions
- Reports to the CPM
- Works closely with the ACPM and other Site Managers both to assist in defining milestones and infrastructure deployment schedules, and to ensure a high level of coherency across the project
- Oversees all staff responsible for deployment and operation activities at their respective site.

5.1.5 Site Architects

Site Architect (SA) responsibilities are:
- Leads the hardware selection activities at their host laboratory, working with the Site Manager who represents the host laboratory facilities and operations capabilities.
- Leads the architectural design effort at their host laboratory, working with the Site Manager who represents the host laboratory facilities and operations capabilities.
  - This design covers computing, storage, networking, monitoring, facilities (space, power, cooling), and integration of these components into a holistic system.
- Establishes performance goals and benchmarks for LQCD systems located at or to be located at their site.
- Assist the SM in the monitoring and assessment of actual performance versus planned performance.
- Assist the CPM to document and communicate:
  - Hardware selection information for acquisition planning (target audience is Executive Committee)
  - Performance goals and benchmarking information for allocation process (target audience is Scientific Program Committee)

Interactions:
- Reports to the CPM
- Works closely with the ACPM, Site Managers, and other Site Architects both to assist in defining milestones, and to ensure a high level of coherency across the project.

5.1.6 Integrated Project Team

The LQCD-ext II Integrated Project Team (IPT) is composed of the LQCD Federal Project Director, LQCD Project Monitor, CPM, ACPM, and Site Managers and Site Architects from the host laboratories. The LQCD Federal Project Director chairs the IPT. The current membership of the IPT is given in Appendix A.

The full IPT meets on an as-needed basis, however subsets of the IPT meet on a regular basis. For example, monthly meetings are held between the Federal Project Director, Project Monitor, CPM and ACPM to review progress against goals and milestones. The CPM, ACPM and Site Managers meet bi-weekly to review project performance on a more detailed, technical level. These meetings often involve planning for subsequent deployments and sharing lessons learned. Site Architects participate in these meetings as well when they involve acquisition planning, architectural design, or other Site Architect responsibilities, or at least every other bi-weekly meeting as a touchpoint.
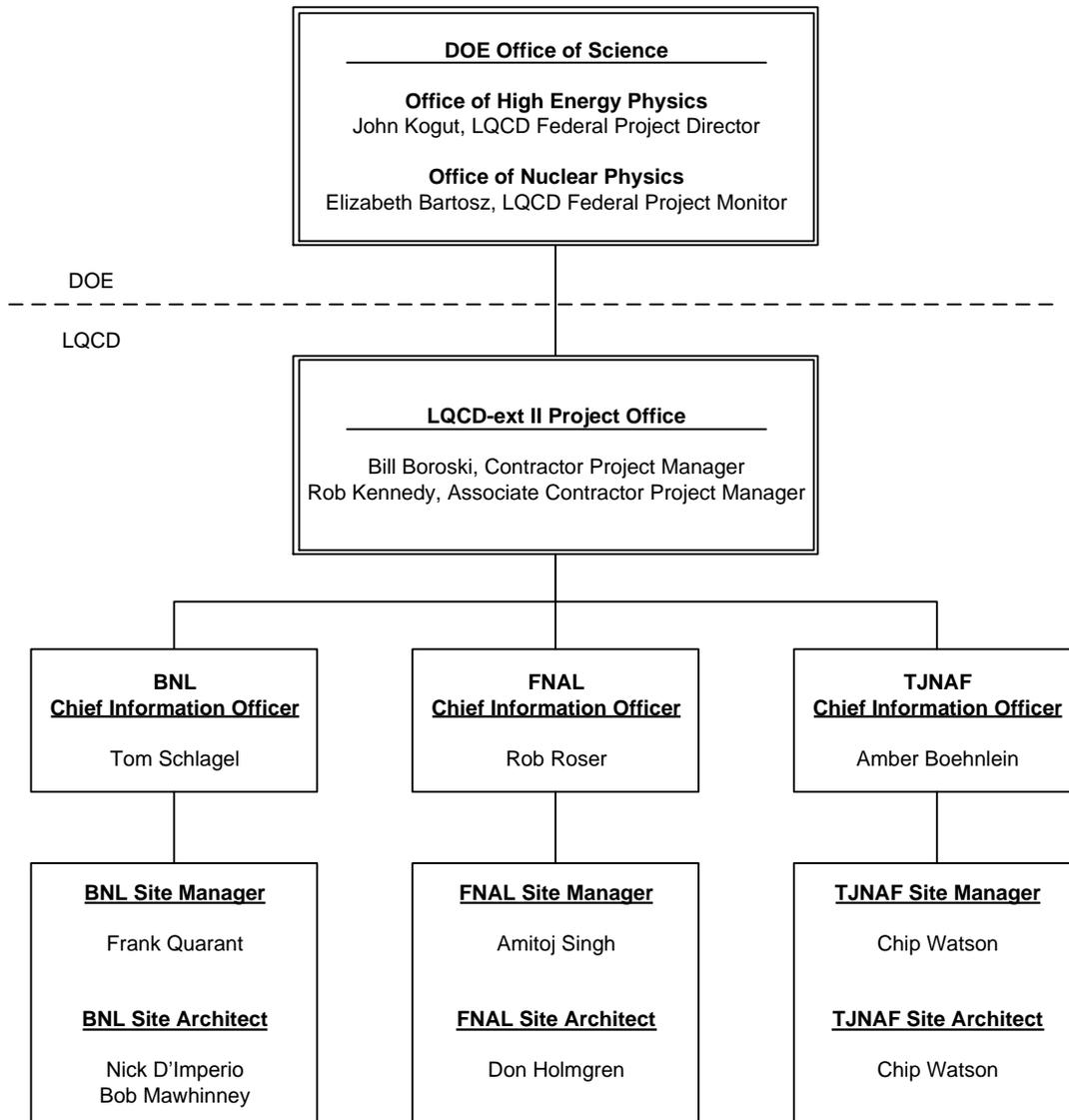

Figure 2: LQCD and Laboratory Management

5.2 Project Communications

In addition to the "Interactions" defined under Roles and Responsibilities, the following formal communications touchpoints are to occur annually, as appropriate:

Touch Point and Timing	Attendees	Actions and Goals
Early Acquisition Planning	CPM, Executive Committee	CPM leads discussion of acquisition planning, timeline. Goal: Concurrence on scope, non-technical considerations as input.
Late Acquisition Planning	CPM, Site Architects, Executive Committee	CPM presents acquisition plan. Goal: Concurrence on proposed acquisition plan.
Early Allocations Process	CPM, Site Architects, Scientific Program Committee	CPM presents performance benchmarks, deployed capacity. Goal: Address questions from SPC related to their Allocations process.
Late Allocations Process	CPM, Site Managers, Scientific Program Committee	SPC presents allocations including expectations for Class B, C allocations in coming year. Goal: Address questions from Site Managers related to their monitoring of allocations.

Appendix A: Integrated Project Team

LQCD Federal Project Director (HEP)	John Kogut (chair)
LQCD Project Monitor (ONP)	Elizabeth Bartosz
Contractor Project Manager (CPM)	Bill Boroski
Associate CPM (ACPM)	Rob Kennedy
BNL Site Manager	Frank Quarant
BNL Site Architects	Nick D'Imperio, Bob Mawhinney
FNAL Site Manager	Amitoj Singh
FNAL Site Architect	Don Holmgren
TJNAF Site Manager	Chip Watson
TJNAF Site Architect	Chip Watson
USQCD Executive Committee Chair	Paul Mackenzie

Appendix B: Committees and Members

USQCD Executive Committee

Richard Brower (Boston U.), Norman Christ (Columbia U.), Frithjof Karsch (BNL), Julius Kuti (UCSD), Kostas Orginos (William & Mary), Paul Mackenzie (Chair, FNAL), David Richards (TJNAF), Martin Savage (U. Washington), and Robert Sugar (UCSB)

USQCD Scientific Program Committee

Tom Blum (U. Conn.), Will Detmold (MIT), Steve Gottlieb (Indiana U.), Anna Hasenfratz (Chair, Colorado), Kostas Orginos (William & Mary), Robert Petreczky (BNL), Ruth Van de Water (Fermilab)

LQCD Change Control Board

Bill Boroski (Contractor Project Manager), Steve Gottlieb (Indiana U.), Paul Mackenzie (Chair, USQCD Executive Committee), Tom Schlagel (BNL), Rob Roser (FNAL), Amber Boehnlein (TJNAF)