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Electron-Ion Collider, Brookhaven National Laboratory			
Doc No. EIC-ESH-PLN-003	Author: C. Schaefer; W. Rainey	Effective Date: August 14, 2024	Review Frequency: 5 years
Plan: Memorandum of Agreement for the EIC Pressure System Program Integration			Revision: 00

Memorandum of Agreement
between
Brookhaven National Lab (BNL)
and
Thomas Jefferson National Accelerator Facility (JLab)
EIC Pressure System Program Integration

August 14, 2024

Prepared by:

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Date: 8/14/2024

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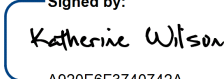
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REVISION HISTORY

Revision	Effective Date	Summary of Change
00	8/14/2024	Initial Release

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Memorandum of Agreement

A. Purpose

The purpose of this Memorandum of Agreement (MOA) is to serve as a written understanding between the BNL Electron-Ion Collider (EIC) Directorate and the Thomas Jefferson National Accelerator Facility (TJNAF) EIC Partner Project. This MOA documents the agreement to use the TJNAF Pressure System Program for pressure systems, subsystems, and components designed, procured, or fabricated at TJNAF and delivered to BNL.

B. Background

BNL and TJNAF have joined to design, construct, and deliver the EIC facility. The EIC project is shared by BNL and TJNAF, but the facility will be located at BNL.

TJNAF has scope to design, procure, and fabricate pressure system systems, subsystems, and components that will be installed and operated at BNL.

Both BNL and TJNAF are required by their prime contracts to have pressure system programs that meet the requirements of 10 CFR 851 Appendix A, Section 4.

C. TJNAF's Pressure System Program Description

In response to 10 CFR 851 Appendix A, TJNAF formed a Pressure System Committee to define the Lab's policies and procedures and "ensure that pressure systems are designed, fabricated, tested, inspected, maintained, repaired, and operated by trained and qualified personnel in accordance with applicable and sound engineering principles." Pressure Systems are defined as any combination of vessels, piping, instrumentation (e.g. gauges), and/or equipment (e.g. pumps or compressors) either containing a fluid under internal pressure or exposed to external fluid pressure. Note that vacuum systems are a subclass of pressure systems.

The TJNAF Pressure Program is detailed in the Pressure and Vacuum Systems Safety Supplement to the TJNAF ES&H Manual 6151. The Pressure and Vacuum Systems Safety Supplement contains several Pressure System Forms which record the identification, test, inspection, and peer review of each pressure system, subsystem or component.

D. BNL Review and Acceptance of TJNAF's Pressure System Program

The BNL Pressure Safety Committee reviewed the TJNAF Pressure and Vacuum Systems Safety Supplement, Rev 1.0, dated 11/06/2015, including all Pressure System Forms, and determined it meets all the requirements of 10 CFR 851 Appendix A, Section 4. As such, the TJNAF Pressure Safety Program provides equivalent safety protections as the BNL Pressure program and can be used as a substitute to the BNL Pressure Program for pressure system systems, subsystems, and components installed and operated at BNL.

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The BNL Pressure Safety Committee acknowledges one notable difference between the BNL and TJNAF pressure system programs is the handling of equivalent measures described in 10 CFR 851 Appendix A, Section 4.(c). The BNL pressure program requires the equivalent measures to be approved by the BNL Pressure Safety Committee; whereas the TJNAF pressure program requires the equivalent measures to be approved by an independent Design Authority. This difference is noted and accepted.

E. Pressure System Deliverables

BNL will accept pressure system systems, subsystems, and components which were designed, procured, or fabricated in accordance with the TJNAF Pressure and Vacuum Systems Safety Supplement.

Any TJNAF pressure system forms associated with pressure systems, subsystems, and components delivered to BNL will be available to BNL as part of the end-item documentation packages. End-item documentation packages must be agreed to and approved by BNL and TJNAF personnel.

F. Revisions to the TJNAF Pressure System Program

The TJNAF EIC ESH Manager will provide all future revisions to the TJNAF Pressure and Vacuum Systems Safety Supplement and associated Pressure System Forms to the BNL EIC ESH Manager for their records.

G. Dispute Resolution

Disputes between TJNAF and BNL on the application of the TJNAF Pressure and Vacuum Systems Safety Supplement will be reviewed and resolved by the TJNAF and BNL Project ESH Managers. If a resolution cannot be reached by the Project ESH Managers, then the respective Lab ESH Safety committees will be consulted.

H. Modifications

Modifications within the scope of this MOA will be made by mutual consent of the parties and by issuance of a written modification, signed and dated by all parties, prior to any changes being made.

I. Termination

Either organization may, in writing, terminate this MOA in whole, or in part, at any time prior to the expiration date.

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J. Points of Contact

The principal points of contact for this instrument are:

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K. Commencement/Expiration Date

This instrument is executed as of the date of the last signature and is effective through the end of the EIC project, at which time it will expire unless modified.