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Process Description: Process for Planning and Authorizing ePIC Component Testing Activities			Revision: 00	

Electron Ion Collider Process Description

# Process for Planning and Authorizing ePIC Component Testing Activities

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### **REVISION HISTORY**

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00	8/27/2025	E. Aschenauer, R. Sharma	Initial Version

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## **TABLE OF CONTENTS**

1.	Pu	rpose and Scope	. 5
2.	Pre	erequisites	. 5
3.	Pro	ocess	. 5
4.	Re	ferences	. 7
	4.1.	EIC-ISG-PDN-001, Management of EIC Documents and Records	. 7
	4.2.	SBMS Subject Area, Work Planning and Control.	. 7

Electron-Ion Collider, Brookhaven National Laboratory				
Doc No. EIC-DET-PDN-001	Review Frequency: 5 years			
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#### LIST OF ACRONYMS

BNL	Brookhaven National Laboratory
ERC	Experimental Review Coordinator
EIC	Electron-Ion Collider
EPD	<b>Environmental Protection Division</b>
ePIC	Electron-Proton Ion Collider
ESR	Experimental Safety Review
<b>ESSH</b>	Environment, Safety, Security, and Health
JTA	Job Training Assessment
NEPA	National Environmental Policy Act
PI	Principal Investigator
SBMS	Standards Based Management System

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#### **Process for Planning and Authorizing ePIC Component Testing Activities**

#### 1. PURPOSE AND SCOPE

ePIC (electron-proton ion collider) detector systems design and component testing activities will occur in several BNL facilities by both BNL staff and non-BNL staff. These work activities will be authorized primarily under BNL's experimental safety review (ESR) process, which is addressed in the SBMS Work Planning and Control Subject Area. This process description supplements the subject area ESR requirements to ensure ePIC Detector management is aware of the planned activities and can coordinate the work between EIC's Experimental Review Coordinator (ERC) and other facility ERCs, should the work be performed in their facilities.

Boxes may be used to highlight critical information.

## 2. PREREQUISITES

- 2.1 A need exists to perform ePIC Detector design and component testing work using one or more BNL facility lab spaces.
- 2.2 A Principal Investigator (PI) needs to be assigned as point of contact for each authorized design and component testing work activity.
  - 2.2.1 Guest/Users may be assigned as PIs provided they have a guest number and a BNL domain account to access the online ESR system. It is advisable to assign a BNL scientist as CO-PI in these instances.

#### 3. PROCESS

Electron-Ion Collider, Brookhaven National Laboratory				
Doc No. EIC-DET-PDN-001	Review Frequency: 5 years			
Process Description: Process for Planning and Authorizing ePIC Component Testing Activities			Revision: 00	

- 3.1 The PI planning to conduct ePIC design and component testing activities provides a written description of the scope of work to the ePIC Detector Systems Division Director and EIC ESH Manager.
- 3.2 The ePIC Detector Systems Division Director approves or disapproves the planned work.
- 3.3 Training requirements will be identified based upon the hazards of the work and the location of the work.
  - 3.3.1 The Physics Department Job Training Assessment (JTA) "PO-01A: Physics Department Guest" will be assigned by EIC's Training Coordinator to all staff working under an approved ESR in Physics Department labs.
- 3.4 EIC work will not be performed under an existing Physics Department ESR unless both the Physics Department ERC, EIC ERC, and ePIC Detector Systems Division Director concur.
- 3.4.1 EIC ESRs will be used for all design and component testing work performed in EIC facilities.
- 3.5 The PI (or "Responsible Person") performs the following:
  - 3.5.1 Works with the EIC ERC to prepare the ESR. See the on-line link in the Work Planning and Control Subject Area.
  - 3.5.2 Addresses environmental, safety, security, and health (ESSH) concerns, including ensuring appropriate controls are established for all phases of the experiment.
  - 3.5.3 Ensures all wastes and disposal pathways are identified.
  - 3.5.4 Verifies the requirement for a National Environmental Policy Act (NEPA) review and works with the Environmental Protection Division's (EPD's) NEPA Coordinator to ensure one has been completed, if required.
  - 3.5.5 Works with the person knowledgeable and responsible for the space (e.g., Research Space Manager) to consider equipment and activities that can impact the space or other occupants.
  - 3.5.6 Ensures all electrical equipment is inspected by a qualified Electrical Equipment Inspector (EEI) prior to being placed into operation.
  - 3.5.7 Works with the ERC-appointed review committee to ensure all safety and compliance concerns have been addressed.
  - 3.5.8 Provides a reviewed ESR to Line Management to authorize or deny the work to begin.
  - 3.5.9 Ensures staff working under an approved ESR meet all training requirements prior to the start of work.

Electron-Ion Collider, Brookhaven National Laboratory				
Doc No. EIC-DET-PDN-001	Review Frequency: 5 years			
Process Description: Process for Planning and Authorizing ePIC Component Testing Activities			Revision: 00	

#### 4. REFERENCES

- 4.1. EIC-ISG-PDN-001, Management of EIC Documents and Records
- 4.2. SBMS Subject Area, Work Planning and Control