October XX, 2023

The Honorable Jennifer Granholm Secretary of Energy United States Department of Energy 1000 Independence Avenue SW Washington, DC 20585 The Honorable Shalanda D. Young Director Office of Management and Budget 725 17th Street NW Washington, DC 20503

Dear Secretary Granholm and Director Young:

As members of the Electron-Ion Collider User Group (EICUG), a diverse community of more than 1400 physicists from 95 laboratories and universities across 34 U.S. states, and over 184 international institutions, we write to you today to express our strong support for the Department of Energy's (DOE) Electron Ion Collider (EIC) project and urge you to provide increased funding in the FY25 DOE budget request to support its construction consistent with the project plan.

As we noted in our letter last year, the world-leading, one-of-a-kind EIC will maintain America's leadership and competitiveness in nuclear, accelerator, detector, and computing science — areas that are essential to economic advancement, national security, and technological development — for decades to come. The EICUG strongly supports the recently released 2023 Long Range Plan for Nuclear Science, *A New Era of Discovery*, which recommends "the expeditious completion of the EIC as the highest priority for facility construction." The plan goes on to note that because it is the first collider of its kind to be constructed in the world, "leading-edge accelerator and detector technology developments at EIC will have broad impact" on "industry, medicine, and security."

Before we get to the details of our ask, we would like to thank you for your continued leadership and support of the Department of Energy, specifically the Office of Science. As you well know, stable and sustained investments in fundamental science research are the lifeblood of our nation's innovation ecosystem, and support the scientists and technicians performing these critical activities. That said, **our primary concern is that funding to support the successful construction of the EIC remains insufficient, risking both the project and US leadership in nuclear physics.**

Part of the reason for choosing BNL for siting the EIC was the approximately \$2 billion in cost savings resulting from the re-purposing parts of the Relativistic Heavy Ion Collider (RHIC) and its tunnel for the EIC. The success of the EIC is critically dependent on several years of **sustained and dedicated** funding to support the transition of the highly trained workforce from RHIC—the only operating collider in the U.S.—to the EIC. Such funding will also support construction of the EIC, and ensure that the EIC project is advanced enough at the time of the completion of the RHIC science mission to keep the staff critical to the installation and implementation of new EIC components and the operation of the new facility.

Unfortunately, funding to-date has been well below the levels required for such an optimally smooth transition, and below the level required to execute the technically driven and most efficient construction schedule that would deliver the project on time and on budget. While our community remains grateful for the additional \$138 million in funding that the Inflation Reduction Act provided to the EIC project, it was a one-time investment, and to be successful, more regular funding is still needed.

Many in our community advocate for strong and sustained funding with modest annual increases for the Office of Nuclear Physics, and we maintain that the nuclear physics research agenda is best enabled through a balanced scientific portfolio that includes the construction of new capabilities. To that end, as you prepare the Department of Energy's budget request for FY25, we ask that you provide robust funding for the Office of Science and its Office of Nuclear Physics, and specifically provide additional funding necessary for the construction of the EIC, recognizing that the published project plan calls for \$219 million in EIC funding in FY25.

This funding is essential to successfully ramp-up the development and construction of the EIC. Such funding ensures the transition of the highly specialized and trained workforce from RHIC to the EIC, and promotes their ability to train early career scientists in the process. Additionally, the 2023 Long Range Plan underscores that the "EIC's compelling, unique scientific opportunities and cutting-edge technologies are attracting physicists worldwide, and international engagement and contribution are important to the collider's realization and the success of the EIC science." Ultimately, failing to deliver the funding necessary at this critical juncture will jeopardize the trust and financial support of our international partners, impact the future nuclear science workforce, and result in significant delays and cost overruns for the entire project.

Thank you again for your ongoing support of and investment in fundamental science research. We appreciate your consideration of our request.

Sincerely,

The Electron-Ion Collider User Group (EICUG)