RECOMMENDATION

It is recommended that the Board of Governors authorize the President, or his designee, to award a contract not to exceed $2,024,738 to the European Laboratory for Nuclear Physics (CERN) in Geneva, Switzerland to procure electronic and mechanical components to fabricate major upgrades to the Time Projection Chamber (TPC) and Inner Tracking System (ITS) which is part of a Large Hadron Collider experiment located in Geneva.

BACKGROUND AND PROJECT DESCRIPTION

The Department of Physics and Astronomy in collaboration with the University of Tennessee, Knoxville is part of a Large Ion Collider Experiment (ALICE) which is a project funded by the U.S. Department of Energy.

In order for CERN to upgrade the Large Hadron Collider for advanced experiments, it is necessary to upgrade certain components of the experiment (e.g. Time Projection Chamber and Inner Tracking System). WSU will assist in this endeavor which is known as the “ALICE Barrel Tracking Upgrade” (BTU) project. It will involve WSU procuring $2,024,738 in specialized electronics i.e. gem foils and mechanical components that can only be procured through CERN since they are the sole source of these very specialized components and are not commercially available elsewhere. These gem foils are shipped from Europe to WSU and WSU’s role is primarily to perform quality assurance testing of the gem foils and glue them onto special frames that will eventually go into the Time Projection Chambers. Once WSU completes our part of the fabrication process, these components are then shipped to Yale University for further assembly.

The funding for this project and the associated procurement of the $2,024,738 in components is secured through a subcontract award (Grant #25RQC) from the University of Tennessee, Knoxville to WSU. As a condition of being awarded this subcontract, it explicitly requires WSU to procure these components only from CERN.

PROJECTED BUDGET

Funding Sources

(1) Subcontract from University on Tennessee  Grant #25RQC  $2,024,738

Total Sources  $2,024,738

Expenditures Plan

(2) Material (e.g. Gem Foil, Electronic Components, etc.) $2,024,738

Total Expenditures  $2,024,738

(1) WSU has already received $473,732 during the period of 9/15/2015-11/14/2017 and anticipates an additional $1,551,006 during the period of 11/15/2017-11/14/2018 for a total projected award of $2,024,738.

(2) Material and components are only procured as the additional incremental funding is received. Since the total aggregate of materials and components procured during this award timeline will exceed $1M, it requires the BOG approval.