**Response to ERR Charge**

1. **What are the running conditions for the experiment? Please state clearly the target and beamline configurations and operation.**

We run with GlueX in standard configuration using the standard diamond radiator with the coherent peak at approximately 9 GeV. We run at x2 lower luminosity than standard GlueX with 2x10^7 photons/s flux. We plan to run 5 days on deuterium including empty target calibration runs + 2 shifts to change to 4He target + 1 day running on 4He + 1 day to change to 12C foil target + remaining 7.25 days on 12 C.

Follow-up: Sasha to check trigger rates and thresholds on shift sometime next week.

1. **What is the operational status/performance requirements of the target system needed by the experiment? If not completed, what are the completion/commissioning schedules, tasks and user commitment?**

We will run with a 30 cm-long cell that has a copper heat shield installed around the outside for both the deuterium and 4He running (both ~4% radiation length). We will run a separate carbon foil target that is 1.9 cm-thick and 7% radiation length.

Follow-up: Chris Keith could speak about this at our review. Check with Chris if 4He density known at couple %-level….is this acceptable for us? Do we need to plan for Compton calibration?

1. **Has the spectrometer, detector configuration been defined, including ownership, maintenance and control during beam operations?**

Spectrometer and detectors will be in standard in GlueX configuration. Detector support will come from Hall D staff members and responsible parties have confirmed (see <https://halldweb.jlab.org/level-1/manpower.pdf>).

1. **What is the impact of the expected neutron radiation on GlueX detector components such as the SiPMs? Is any local shielding required? Are the radiation levels expected to be generated in the hall acceptable?**

We will install some extra neutron detectors in the Hall. If rates become unacceptable, we will reduce luminosity. This is primarily a concern with the deuterium target.

Follow-up: Pavel Degtiarenko helped with PrimEx and has some experience with the He target backgrounds and FLUKA simulations. We run at about x4 higher rate. Needs to be addressed.

1. **What is the expected data rate for the experiments?**

Follow-up: Need to estimate rate from GlueX. Specifically, for carbon. We overall run at x2 lower luminosity, but our carbon target is approximately double the radiation length of standard GlueX hydrogen target (we can assumed reasonable margins for deuterium and 4He targets since they are lower radiation length thickness).

1. **Are the responsibilities for carrying out each job identified, and are the manpower and other resources necessary to complete them on time in place?**

All GlueX collaborators invited to take shifts and participate in analysis. Shifts covered by our group, at a minimum, from TAU/MIT/ODU/GWU. We have a student from MIT already involved and will have students from GWU and MIT for analysis. No plan to go through full GlueX experimental approval prior to ERR (but we can continue after).

Follow-up: Currently obtaining full list of collaborators and excluding those who want to opt-out. We will update the names on the proposal to include.

1. **Are the beam commissioning procedures and machine protection systems sufficiently defined for this stage?**

Yes. This is all standard GlueX calibration and procedures.

1. **What is the simulation and data analysis software status for the experiment? Has readiness for expedient analysis of the data been demonstrated? What is the projected timeline for the first publication?**

First publication anticipated to be within a year. Group has abundance of experience analyzing short range correlations with electron beams in other experiments and a strong track record for early publications.

1. **What is the status of the specific documentation and procedures (COO, ESAD, RSAD, ERG, OSP’s, operation manuals, etc.) to run the experiments?**

Follow-up: We need assigned Physics Division Liasion to work with us to get initial documents together for approval.