

Hall C: NPS, E12-13-010, E12-13-007, E12-14-003, E12-14-005  
Experiment Readiness Review  
Jefferson Lab May 15, 2019

### **Charge**

1. What are the running conditions for E12-13-010, E12-13-007, E12-14-003, E12-14-005 experiments?
2. What is the status of the Neutral Particle Spectrometer. Precisely:
  - a) *magnet*: design, assembly, testing
  - b) *Calorimeter*: crystals and PMTs procurement and characterization
  - c) *Mechanical Structures*: Frame and Platforms realization
  - d) *Electronics*: FE and Readout boards procurement and characterization
  - e) *Infrastructure*: cables, HV, crates procurement
  - f) *trigger, DAQ, Slow Control*: integration in the Hall C systemIf the above elements are not already completed, what are the completion/commissioning schedules, tasks and user commitment?
3. What are the controls in place to assess the operational performance of the Neutral Particle Spectrometer. For example:
  - a) *PMTs gain*
  - b) *crystals light output*
4. Has the entire beam line, spectrometers, detector configuration been defined, including ownership, maintenance and control during beam operations?
5. Are the responsibilities for carrying out each job identified, and are the manpower and other resources necessary to complete them on time in place?
6. Are the beam commissioning procedures and machine protection systems sufficiently defined for this stage?
7. Are the radiation levels expected to be generated in the hall acceptable? Is any local shielding required to minimize the effects of radiation in the hall equipment?
8. What is the simulation and data analysis software status? Has readiness for expedient analysis of the data been demonstrated? What is the projected timeline for the first publication? Please provide a documented track record from previous experiments.

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