## WG: Information required to determine DAQ requirement.

**PMT**: pulse height spectrum

SAS: Quantify degradation to reco due to time resolution.

**PMT**: provide TTS

SAS: Impact of loss of linearity on reco quality.

**PMT:** Impact of space charge?

SAS, Calibration: What is maximum event rate?

**SAS:** What is the longest duration event?

SAS: What is required absolute timing stability for reactor, SN, SNEWS?

SAS: What is double pulse resolution required by reconstruction?

**SAS:** What inter-channel timing precision is needed for reconstruction?

SAS: What is PMT charge distribution? How large are largest hits?

**SITE:** Provide operating temperature of 0-40C for electronics.

**LOGISTICS, PRO-CUREMENT:** Provide transportation of electronics minimizing mechanical shock and extreme temperatures.

SITE: Provide 40-60% humidity level for electronics.

SAS: Confirm that noise at 50% of SPE threshold will not impact reconstruction.

SITE: Provide mains power conditioning as specified by DAQ WG.

PMT: Provide HV rampdown time to minimize possible damage to PMTs

**SITE:** Provide this level of sustained power.

**SITE:** Provide this peak power level.

**SITE:** Provide GPS timestamp.

**SITE, SAS:** Once SAS specifies trigger threshold, data bandwidth to surface can be estimated.

**DAQ S/W, SAS:** The in-situ storage for built events must be sufficiently large to store one week's data. Storage required depends on SAS-specified trigger threshold.

SITE: Provide space for up to 10 racks of electronics in the mine.

SITE, SAFETY: Provide mechanical and electrical connections of racks to floor/ground.

CAL: Information: External calibration triggers will be supported by DAQ.

**LOGISTICS:** Provide a unique identifier system for various units in the DAQ system, like PCB cards, crates, racks, etc.

SITE, CLEANLINESS: Comment on use of cadmium, zinc, tin in electronics.

**PROCUREMENT:** Provide commercial parts that will not operate in excess of 80% of manufacturer's spec.

**PROCUREMENT:** Provide high-reliability parts.

**PROCUREMENT:** Do not select parts with overlong procurement lead times.

**PROCUREMENT:** Do not exceed per-channel cost of a fully commercial DAQ solution (e.g., from CAEN)

**PROCUREMENT:** Provide parts from suppliers meeting high standards.

**PROCUREMENT:** Provide sufficient spares to enable construction of double the number of channels predicted to fail.

**SITE:** Provide underground storage for hot spares

**SITE:** Provide an electronics repair facility on the surface.