

XLZD WBS 1.03 (Xe handling) and WBS 1.04 (Cryogenics)
Notes from July 1 - 2, 2025, LNGS Collaboration Meeting

Unprioritized list of discussion items

1. Where do the following items belong in the WBS:
 - a. vacuum systems
 - b. Safety
 - c. water/polyethylene shielding of the circulation system
 - d. Liquid xenon flow
 - e. Multiple Xe circulation loops for Hermetic TPC.
 - f. How many loops do we cost? Multiple scenarios?
 - g. Methane/tritium removal R&D considerations.
 - h. Cryogenic LXe transfer lines
 - i. Controls appears in 1.04 cryogenics but not 1.03 Xe purification
 - j. Break out plumbing and cable conduits
 - k. Gaseous N2 system (purge gas)
 - l. Engineering modeling
2. Interface issues
 - a. Xe flow modeling / radon tagging.
 - b. Plumbing / hardware interface with 1.02 Xe Acquisition
 - c. Who is managing the vacuum envelope
3. Items needed at upcoming meetings
 - a. Heat leak budget from both experiments
 - b. Power budget from both experiments.
 - c. System sketch to facilitate interface discussions
 - d. Vocabulary translations between LZ terminology and Xenon terminology

Comment: Developing the WBS and writing the dictionary requires interface discussion across L2 items.