Agency personnel changes, limiting continuity and performance. Fuel costs could become significant. Unauthorized access to computing hardware is another problem. Inappropriate use of computer resources is a concern, especially with large-scale systems. Major computer system failures are a risk. The schedule for achieving LQCD investment criteria for new procurements is important. The project acquires systems with a minimum 3-year warranty service. Each project evaluates prototype machines before procuring and installing production hardware. The project procures systems that are modular in nature, if prices exceed expectations in any given year, it is possible to repurpose the hardware. The project is always on the lookout for new power-efficient hardware. The FPGAs deployed in 2013 with 10GigE connectivity to the internet and QDR InfiniBand. FNAL has dedicated networking staff that can support the inter-site and inter-inst. storage hardware will be under warranty till FY23. The project has the ability to transfer data between sites, and the systems suffer a major utility outage. In the event of a planned power outage, facility has the ability to stage from tape to disk. FNAL: The ownership of the mitigation plan belongs to the institution. The project has the ability to transfer data between sites, and the systems suffer a major utility outage. In the event of a planned power outage, facility has the ability to stage from tape to disk.
Inadequate Lustre Support Cost Lustre may require more site effort than currently supported Lustre major and minor versions and the open SFS.

**Probability:**
- Low: 0.050
- Medium: 0.375
- High: 0.750

**Impact:**
- Low: 0.1
- Moderate: 0.25
- High: 0.5

**Risk Priority Number:** Low (0.0125)

**Risk Status:**
- Status: No change
- Prioritized: No

**Risk Description:**
- The performance of commodity hardware components may not improve as fast as times prices may see improvements. The Lustre major and minor versions are not adequately addressed in the USQCD and the Mariner software performance gaps in the years at the project.

**Risk Mitigation:**
- The project must sign this risk. We will not invent the frame project (or the TID) for software development projects or that we are a team that needs to be absorbed. They must sign this risk.

**Risk Reassessment:**
- Schedule reassessment at the end of the project (mid FY17)