





## **2x2 Installation Status**

Jen Raaf **ND-LAr Consortium Management Meeting December 13, 2023** 



## **Updates**

- AC distribution upgrade work
  - Initial scope of work completed
  - Additional scope (install 208V/3phase outlets) started, should finish by next week
- ODH fan upgrade work
  - If timelines are too long, backup plan is to classify MINOS area as ODH-1 temporarily
    - Requested ISD input on how to move forward with temporary ODH-1 solution, since contract work seems unlikely to be done before beam delivery starts.
- Experiment racks
  - All essential racks are underground and in place now
    - Purity Monitor rack and Cryo Controls rack moved yesterday
  - Module-2 (LArPix v2b chips) requires uninterrupted power, not previously understood/planned in detector readout/power rack
    - Linda et al. are working toward a solution that won't require someone to physically go underground to change a UPS power source in the case of a longer outage
- Cryogenic infrastructure
  - Cryo system ready for pump-down
  - Only small bits of work remaining (fill manifold, few welds of instrument lines, etc)
- Cryo controls system
  - Good progress on controls work; Trevor and Brandon now working to update their estimated completion date (sorry, please continue to bear with me not giving you a date yet – I will report this as soon as I can)

# Fermilab

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## **Updates**

- TPC module charge readout feedthroughs
  - CRO feedthrough flange adapters to be installed in early January, after winter break
    - Andrew & Armin have developed tool for safe connector removal,
      will have it built, and practice using it before real application
- Accelerator beam delivery
  - Updates to SAD/ASE documents are progressing according to schedule
    - Internal review of Linac documentation went well positive recommendations with only minor additions/modifications needed. Linac should be back up and running by the end of January (in agreement with schedule presented by accelerator experts)
    - Booster & Main Injector back online by mid-February



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