

10. For the modular water Cerenkov approach, are you defining 3 modules as your baseline detector?

The authors of report [14] reply:

“Yes, there are three main reasons we believe 3 modules is an optimum choice to start with. First, because of the longer running times possible at FNAL it appears that a 300 kT fiducial mass is sufficient to reach the desired sensitivity for neutrino oscillations. Second, it is clear that for proton decay searches a larger detector is needed, but for current background projections a few background events are expected in favored decay modes after exposure of 1 MT-yr. We believe that proton decay searches will benefit from further detector and analysis improvements after reaching this level of sensitivity. Any modules built after the first 3 modules will benefit from this knowledge. Third, there is considerable cost saving by starting the simultaneous construction of 3 cavities in the region of relatively well-known Homestake rock near the Ray Davis Chlorine chamber as explained in [14]. “