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35t Prototype Detector for Experiment at Long Base Line Neutrino Facility (ELBNF) Far Detector GABRIEL SANTUCCI, Stony Brook University, ELBNF COLLABORATION — The 35ton prototype detector is a Liquid Argon Time Projection Chamber (LAr TPC) utilizing a membrane cryostat. It serves as a prototype for testing technology proposed for the ELBNF far detector. The construction of the prototype is an essential part of the ELBNF project due to the large amount of new technologies introduced for the far detector. In early 2014, it was shown that the membrane cryostat technology was able to reach and maintain the required LAr purity and an electron lifetime of 2.5 ms was achieved. The goals for the next phase include the installation of a fully functional TPC using the novel designs for the ELBNF far detector as much as possible. This includes the installation of the cold electronics, scintillation photon detectors and multiple Anode Plane Arrays with wrapped wires. In this talk I will review the status of the 35t prototype detector and describe what has been accomplished during 2014 and early 2015, including the commissioning phase and the early stages of data taking from cosmic-rays.

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