Upgrades for the STAR Experiment Slow Controls at Brookhaven National Laboratory

SAMUEL RUIZ, JIRO FUJITA, Creighton Univ — The STAR (Solenoidal Tracker at RHIC) experiment at Brookhaven National Laboratory studies the collisions of relativistic heavy ions. Some components of the control system for STAR have not changed since STAR became operational in 2000. The goal of this project is to upgrade the control system software for easier maintenance. The software upgrade also requires modernizing the hardware in some cases. A prototype for monitoring the Field Cage for the Time Projection Chamber (TPC) and a prototype for controlling the TPC front-end electronics using a programmable logic controller were developed. Newly developed software for the hygrometer to monitor the experiment environment was deployed at the experiment. Details about the software and hardware upgrades, as well as the developed prototypes will be presented.