

PLC AND SCADA BASED AUTOMATION OF ELEVATED SERVICE RESERVOIR

PRATIK GADKARI¹, SUMEET KULKARNI² & SANTOSH RAJGADE³

^{1,2}BE Student, Department of Instrumentation Engineering, AISSMS's IOIT, Pune, Maharashtra, India ³Assistant Professor, Department of Instrumentation Engineering, AISSMS's IOIT, Pune, Maharashtra, India

ABSTRACT

The world has been revolutionized with the introduction of automation in almost all productivity, decreasing costs of manufacturing, improving quality and more importantly upgrading of working condition of the human labour. As we all know that water is very fragile natural resource which is very essential for every individual. So it's become very mandatory to handle water properly in sophisticated way. Earlier water was supplied in metropolitan area's was not so automated. So it becomes unprecised and water was not managed properly as per the requirement of various zones as they were mostly manually operated which results wastage of water. With the help of Programmable Logic Control (PLC) we have developed automatic control of Elevated Service Reservoir (ESR) which was previously done manually which leads to wastage of water in great extent. It not only controls but also it monitors whole process with the help of Supervisory Control and Data Acquisition (SCADA)

KEYWORDS: Automation, ESR, PLC, SCADA