

**DESIGN OF PURIFIER AUTOMATION SYSTEM BASED ON WATER
CONTENT INDICATOR ON LUBE OIL BFPT UNIT A**

PLTU BANTEN 1 SURALAYA

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PLTU Banten 1 Suralaya is a power plant that has a capacity of 1x625 MW. To generate 625 MW power then BFPT A and BFPT B must be in running condition. At the time of running certainly needed lubrication to the bearing BFPT and other equipment.

Oil is a viscous liquid which is used as lubrication oil on the bearings one of which is bearing on BFPT. Because of the importance of oil for lubrication, the oil must be in good condition. To get a good lubrication the oil viscosity and water contamination factors must be considered.

To improve the reliability and performance of BFPT, one way is to maintain the quality of oil used to avoid being contaminated with water so that water will not corrode the BFPT bearing and increase the life time of the oil. In this discussion we will discuss the equipment used to monitor the moisture content of BFPT lube oil by using water content sensor and with water content indicator it will be made Programmable Logic Control (PLC) equipment to manage Lube Oil Purifier to suit the condition.

Keywords: BFPT Lube Oil, Lube Oil Purifier, Water Content, Programmable Logic Control