

**MODIFICATION OF CONTROL SYSTEM SEALING FOR
EFFICIENCY MAIN COOLING WATER PUMP ON WATER INTAKE
BLOCK 1-2 AT UPJP PRIOK**

ABSTRACT

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Water intake plant is one of the Balance Of Plant (BOP), which serves as a supplier of sea water, for manufacturing of fresh water desalination plant as well as a supplier of seawater for the cooling system at the condenser and Close Cooling Water (CCW) which is pumped by Main cooling Water Pump (MCWP). But in MCWP need water for sealing and cooling lubricants in the motor bearings MCWP. For now at MCWP sealing system is supplied from water service when MCWP will operate. But after the operation, the sealing system using sea water supplied from the booster pump. The purpose of this research is to reduce the use of water service as sealing and cooling lubricants in MCWP and also saves power consumption itself, as well as maintaining the efficiency of MCWP. By modifying the control system of sealing or change squence of MCWP and adds to the pipe lines of Screen Wash Pump (SWP) to MCWP. So the need for cooling water for sealing and bearing lubricants taken from the discharge SWP regulated by controlling the solenoid valve opening.

Keywords : Main Cooling Water Pump (MCWP), Sealing Control System Modifications, Selenoid Valve.