ANALYSIS THE APPLICATION OF IMPRESSED CURRENT ANTI FOULING (ICAF) ON MAIN WATER COOLING SYSTEM AT THE 1ST AND 2ND UNIT PAITON STEAM POWER PLANT

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ABSTRACT

There are several unit at Paiton steam power plant, the one of all is the 1st and 2nd unit that operated by PT. PJB Unit Pembangkitan Paiton. The main cooling system at the 1st and 2nd unit Paiton steam power plant are using sea water as main medium for cooling. Before make cooling process, there are several treatment are applied for sea water like chlorine injection to fainting the sea water microorganism, so it can not grow at pipe canal. After that, the treatment for sea water is screening plant. It has function to screening a solid object and the big sea water microorganism. But the treatment of chlorine injection are not effective cause still many marine growth at the main equipment cooling system. So depend on this condition, the another method are needed for preventive marine growth adding at main cooling system. The method is Impressed Current Anti Fouling (ICAF). The ICAF method have been applied at Indonesian National Armed Forces ship war (korvet sigma) cooling system. So depend on this condition, the ICAF method are possible for applied at Paiton.
steam power plant especially at the 1st and 2nd unit that using seawater for main medium cooling system.

Keywords: chlorine injection; screening plant; ICAF; fouling; main cooling system