

TEERACHAI ROJANAPISUTH : COST CONTROL IN THE BANGKHEN WATER  
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This thesis investigates the cost control in the Bangkhen Water Treatment Plant of the Metropolitan Waterworks Authority. The main objectives are to study and analyze the operating cost of water production, and the cost control of electricity and chemicals in the plant.

The main findings are as follows :

1. The average total operating cost for one cubic metre of water production in the Bangkhen Water Treatment Plant is 0.3931 Baht (However, this cost is not included the costs of raw water supply system and treated water transmission & distribution system, investment costs and all other expenses of the Metropolitan Waterworks Authority)
2. The average proportional cost for one cubic metre of water production in the plant consists of electricity 51.1% , chemicals 37.2%, salaries 7.7% and others 4%.
3. The average proportional cost for electricity consists of electric energy charge 81% and Peak demand charge 19%.
4. The Lowest electricity cost for one cubic metre of water production in the plant is 0.1919 Baht in the fiscal year 1990.
5. The average proportional cost for chemicals consists of alum 72.2%, chlorine 25.3%, lime 1.8% and polyelectrolyte 0.7%.
6. The lowest chemicals cost for one cubic metre of water production in the plant is 0.1170 Baht in the fiscal year 1991.
7. As for the cost control system of the electricity and chemicals in the plant, the complete control system is 80%, and the control result meets the control target at 80%.

Suggestions are also given for higher performance. It includes the improvement guidelines for the cost control system of electricity and chemicals, the control system of water production quantity and water quality in the plant, and the adjustment of operation report forms to be more accurate and complete.