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SCIENTIFIC & RESEARCH PROJECTS

Project No.: 09 **Year:** 2010

Project Field: **Water & Wastewater**

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Project Title:

Debottlenecking Procedure of Effluent Thermal Treatment System

Abstract:

In this study pinch technology has been improved for wastewater temperature reduction. Having considered design grouping rules on the basis of pinch technology, a new debottlenecking procedure for thermal treatment of the wastewater network, has been introduced. In the presented procedure, better thermal treatment of effluent network using the new method can be used to avoid investment in new cooling tower capacity and to improve the performance of the tower in a systematic way. Related coding in Visual Studio.Net 2003, Cpp, has been developed for the illustrative example to get optimal values in the cooling water design method computations.