

Monitoring System for Co-generative Power Plants

Ion Miciu¹, Florin Hărtescu²

¹ IPA SA - Automation Engineering; Calea Floreasca 169, 14495 Bucharest, Romania

E-mail: ionmiciu@ipa.ro

² National Institute for R&D in Informatics, 8-10 AVERESCU Avenue, 71316 Bucharest 1, Romania

E-mail : flory@ici.ro

Abstract : Electric power systems are an integral part of the way of life in modern society. The electricity supplied by these systems has proved to be a very convenient, safe and clean form of energy. The monitoring of the gas co-generative processes is the main source of information for the technological and economic management. Based on a high performance system, a real-time model provides a permanent updated image of the efficient working status of the electrical power process, providing beside the direct acquired information complex calculations of specific consumptions. The purpose of the automatic functioning of the entire co-generative power plant is the optimisation of the co-generative electrical energy commissioning in the national energy system and the commissioning of thermal energy to the consumers.

Keywords: Electric power systems, Co-generative gas power plant, Control of distributed parameter systems, Distribution Management System, Process control, Optimisation, Simulation, Real time systems