The Management of Thermal Quantity and Carbon Monoxide during Lignite Combustion

A. Haxhiaj 1,∗, Z. Elezi 2, E. Haxhiaj 3

1,2 Faculty of Mining and Metallurgy, UP Mitrovica, Kosovo; 3 American University in Kosovo, Prishtina, Kosovo

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Abstract The impact of gases from the lignite combustion in the production of electrical power is a current crucial factor for planning and development of thermo-energetic companies. Furthermore, it is a sensitive area of study that has an influence in the overall environmental issues. The paper’s objective is to analyze the issue of effective management of thermal quantity during lignite combustion and emissions of gases that are product of full and non-full combustion of lignite in the furnace. Thus, the losses of thermal quantity at ignition and during combustion of lignite directly depend on the diameter of lignite pieces intended for combustion. Paper contains the analyses of the thermal value, the composition of combustible and non-combustible materials of Kosova’s lignite. The research on theoretical and practical field of management of thermal quantity of lignite is based and verified by DIN 1942, 1952, 1956 standards which describe effective thermal quantity and losses of thermal quantity during the process of lignite combustion in furnaces.

Key words: Combustion, boilers, lignite, carbon, and carbon monoxide.

∗ Corresponding: E-Mail: ahaxhiaj52@yahoo.com; Fax +381(0)28530 Tel: +37744 251 942