1.01 INTERCOMPARISON OF DIFFERENT MODELS FOR ESTIMATION OF THE BITOLA POWER PLANT AIR QUALITY IMPACT AT LOW WIND SPEED CONDITIONS

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The objective of this paper is an analysis of the air quality impact of the Bitola Thermal Power Plant at low wind speed conditions. In order to perform this analysis, the application of different atmospheric dispersion models has been analysed.

The BTPP, with the emission rate of about 3 kg /s of SO2, is the major Macedonian source of pollution. It is a 675 MW lignite fired plant with two 250 m stacks, located in the Pelagonia valley.

The meteorological situation in the Pelagonia valley is characterised by high percentage of low wind conditions. Namely, in the Pelagonia valley wind speeds bellow 1 m/s (including calm conditions) appear in more than 40 % of the hours per year. In this paper the results of the model inter-comparison in the air quality impact analysis of the Bitola Thermal Power Plant at low wind speed conditions are presented.