

Environmental Performance into Thermoelectric Power Plants

Mădălina Silvia IGNATOV, Valeriu PANAITESCU

Auditors Development Centre, Faculty of Engineers and Technology Management, Polytechnic University of Bucharest, Romania; Hydraulics and Hydraulic Machines Department, Faculty of Energetic, Polytechnic University of Bucharest, Bucharest, Romania
ignatov.madalina@rdslink.ro, valp@hydropub.ro

Abstract

One of the progressive concepts – Environmental performance - is going to occupy quite a high profile in the challenge to de-link economic growth, sustained by energy production, from environmental degradation and to become one of those areas where research at both – the theoretical and corporate level positively flourishes. In this paper we try to present some environmental performance indicators and methods and their applying into Thermo- electrical Power Plants. The results obtained were used to set operating performance indicators and environmental condition indicators based on the ISO 14031 standard and accomplish the Environmental Performance Evaluation.

References:

- [1] Jack J. Fritz, „Environmental Performance of Coal-Fired Power Plants”, World Bank Report, 2006, pp. 1-11.
- [2] Dr. Nenad Sarunac, “Evaluation and comparison of u.s. And eu reference methods for Measurement of mercury, heavy metals, pm2.5 and Pm10 emissions from fossil-fired power plants - Final report”, Energy research center, Lehigh university 117 Atlss Drive, Bethlehem, February 2007, pp. 3-7.
- [3] Jia, L., Baratz, B. and Fritz, J., „Environmental Performance of Bank-Financed, Coal-Fired Power Plants in China”. Washington, D.C.: World Bank, East Asia Environment and Social Development Unit., 2000, pp. 9-13.
- [4] World Bank, „Pollution Prevention and Abatement Handbook”, Washington, D.C.: World Bank, 1998, pp. 26-38.
- [5] World Bank, „China: Air, Land, and Water Environmental Priorities for a New Millennium” Washington, D.C. World Bank. 2001, pp. 45-52.
- [6] Scott Stallard, Vice President, Black & Veatch and Mike Curley, “Leveraging global operating and reliability data can enhance your power plant’s performance”, GADS Services, North American Electric Reliability Corp. 2007, pp. 3-5.
- [7] A.M. Papadopoulos and E. Giama, „Environmental performance evaluation of thermal insulation materials and its impact on the building”, Laboratory of Heat Transfer and Environmental Engineering, Department of Mechanical Engineering, Aristotle University Thessaloniki, 54124 Thessaloniki, Greece, 2007, pp. 1-4.
- [8] Belmane I., Dalhammar C., Arbaciauskas V., “Environmental management”. Lund, 2002, pp. 331-338.
- [9] Bennet M., Rikhardsson P. M., Schaltegger S., “Environmental Management Accounting – Purpose and Progress”, Kluwer Academic Publishers, London, 2003, pp. 1-4.

Proceedings of the 11th International Conference on Quality and Dependability
Sinaia, Romania, September 24th-26th, 2008
ISSN 1842-3566
Pages 388-395

- [10] Hewitt Roberts, Gary Robinson, "ISO 14001 EMS Implementation Handbook", Butterworth Heinemann, Oxford, 1998, pp. 9-15.
- [11] Jasch Christine, Gyallay-Pap R., "Environmental Statements and Environmental Performance Indicators in Austria and Germany", IOW Vienna, Informationsdienst 4, 1998, pp. 315-324.
- [12] Ignatov Madalina, "CET Bacau environmental performance". Individual research program, Unpublished, 2008, pp. 102-106.