

Christmas Workshop Energy Finance 2016 | December 12th – December 16th | Abstract

Combined Heat And Power Production - Valuing Flexible Operation In An Uncertain Environment

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Abstract:

CHP provides an efficient means of converting fuels into power and heat. At the same time operation of CHP units is restricted by thermodynamical and technical constraints and subject to the double uncertainty of power prices and heat demand. The contribution explores the impact of operational flexibility both in the CHP unit (extraction condensing vs. backpressure turbines) and in the system configuration (back-up heat boiler). Analytical results are derived and a numerical application is presented.