

A Combined Cycle Co-generation Plant

Abstract

5 A combined cycle power system for producing power
and steam. The system comprising at least two fuel
turbines capable of combusting fuel to produce power
and exhaust gas from the combusted fuel. At least two
10 heat recovery steam generators are also provided for
producing steam from the exhaust gas. At least one
steam turbine is used to produce power from steam
produced by the heat recovery steam generators. At
least one steam supply stream receives steam produced
15 by the heat recovery steam generators. A heat source
is thermally coupled to the heat recovery steam
generators and being configured to intermittently and
independently supplement heat to one of the heat
recovery steam generators to meet a required steam duty
20 of the steam supply stream and the steam turbine. The
heat source is configured to heat one of the at least
two heat recovery steam generators if the other heat
recovery steam generator is unable to meet the required
steam duty, without a substantial loss of the steam
duty of the steam supply stream and the steam turbine.

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(Fig. 1)