

Title (en)

METHOD FOR THE SHORT-TERM ADJUSTMENT OF THE OUTPUT OF A COMBINED-CYCLE POWER PLANT STEAM TURBINE, FOR PRIMARY FREQUENCY CONTROL

Title (de)

VERFAHREN ZUR KURZFRISTIGEN LEISTUNGSANPASSUNG EINER DAMPFTURBINE EINES GAS-UND DAMPFKRAFTWERKS FÜR DIE PRIMÄRREGELUNG

Title (fr)

PROCÉDÉ D'ADAPTATION À COURT TERME DE LA PUISSANCE D'UNE TURBINE À VAPEUR D'UNE CENTRALE À GAZ ET À VAPEUR POUR LA RÉGULATION PRIMAIRE

Publication

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Application

**EP 17780006 A 20170824**

Priority

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Abstract (en)

[origin: WO2018059840A1] The invention relates to a method for the short-term adjustment of the output of a steam turbine of a combined-cycle power plant, for primary frequency control, comprising the steps of: opening, respectively closing, a backed-up turbine valve (31, 51) of at least one pressure stage (1, 2, 3, 4) of the steam turbine, according to a required change in output; comparing a specified desired pressure (41) with a pressure measurement (32) which is carried out upstream of the backed-up turbine valve (31) to measure the pressure of the steam mass flow flowing into the at least one pressure stage (1, 2, 3, 4); and opening, respectively closing, a feed line (71, 81) for introducing a variable proportion of water into the steam mass flow of at least one of the pressure stages (1, 2, 3, 4) as soon as the pressure falls below or exceeds the desired pressure (41); the variable proportion of water is introduced into the steam mass flow until an adjusted desired steam temperature (49) is reached, which is determined from the difference between a basic specified desired steam temperature (45) and the default value of a controller (48) which operates at least proportionally and evaluates the difference between the pressure measurement (32) and the desired pressure (41).

IPC 8 full level

**F01K 23/10** (2006.01)

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Citation (search report)

See references of WO 2018059840A1

Cited by

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