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Dear Andrew,

Thank you for your email dated 05 August enclosing correspondence from your constituent, Mr Barry Manns regarding an invention by a friend of his called a latent power turbine.

BEIS's technical energy specialist team, who provide engineering advice to the department, carefully reviewed the latent power turbine design as described in the inventor's paper 'the doublethink science of heat engines', and provided a detailed technical assessment which BEIS sent separately to its inventor, Mr Courtney.

Unfortunately, the conclusion was that the invention is impractical and seems to be based on a misconception regarding the efficiency of atmospheric processes. Firstly, the atmosphere is not a 100% efficient heat engine; meteorological processes are powered by solar energy and the conversion efficiency is quite low. Secondly, as a fridge or heat pump, it is grossly inefficient because the temperature drop of the gas as it flows through the constriction is quite small and the heat flow into the pipework from the surroundings is negligible. Thirdly, it is not a practical concept for power generation because the energy required to drive the fan that circulates the air around the system is greater than the energy that can be extracted from the turbine.

I would like to thank Mr Manns for writing but regrettably we are unable to take this invention any further.

Yours ever,

THE RT HON GREG HANDS MP Minister of State for Energy, Clean Growth and Climate Change