Building Nominations for Real-Life Gas Transportation Networks

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Abstract: Checking the feasibility of bookings belongs to the key tasks in gas pipeline operation. The customer orders a booking, that means a maximal in- or output of gas, at a node on the underlying gas network. The gas transportation company has to decide whether to agree to the booking or not. In its most basic form, they have to be able to sent all balanced nominations within the bookings on the exits and entries through the network. A vector of gas input at entries and output at exits together with allowed pressure intervals for all nodes is called a nomination. Due to special agreements with customers it is possible that the nomination consists of power intervals at some exits or entries. In this talk a method is presented to generate nominations for a given booking to decide whether the booking is feasible or not.

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