

# Determine the optimal network operating mode in advance

Strong fluctuations in gas volumes and properties at inlet points lead to major challenges in maintaining network stability and determining optimal modes of operation. With PSIgasguide, gas network operators are supported in optimizing their network operation with variable network inlets. PSIgasguide determines robust control recommendations for every situation. Optimization for gas network operation is based on predefined targets. Network operators can define their own targets and weight each target according to the situation.

- + Formulate evaluation criteria
- + Weigh evaluation criteria
- Compare operating modes
- + Resolve conflicting objectives
- + Compare operating modes and set-up rankings
- + Fahrweisen vergleichen und Ranking aufstellen
- + Check the robustness of rankings



#### **Complexity in Gas Transport**



Operators need to secure supply while keeping an eye on costs and sustainability. They have to meet CO2 reduction requirements, take into account changes in supplier behavior and manage volatile gas mixes in the future.

#### **Operational Requirements**



Gas transportation involves complex interdependencies on a daily basis. Making the right decisions requires a high level of technical expertise in the operation of equipment such as compressors, regulators and valves, while taking into account changing regulatory requirements and the behavior of market players.

## **Optimal Operating Modes**



The optimal operating mode is determined based on more than ten selected evaluation criteria, such as transport restrictions, safety buffers, power consumption and number of active compressors. Each criterion is prioritized and weighted according to the situation.

### **Balanced Objectives**



Objectives change depending on the requirements and situation. For example, the safety buffer evaluation criterion has a completely different priority in summer operation than in winter operation. Use PSIgasguide to balance your transport goals for every situation.

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