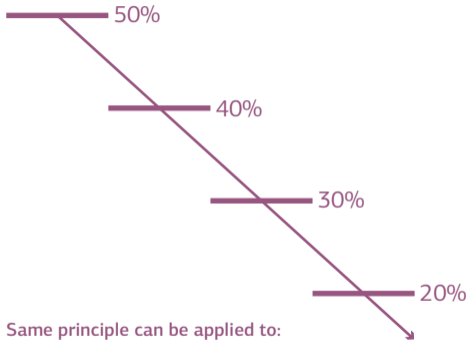


Reduction of minimum load



Same principle can be applied to:

- Increased load gradients (ramp rates)
- Start-up optimisation

Optimisation approach

A 50-45-40% minimum load may be achievable through trial and error.

An increasing number of alarms and trips must be addressed through control optimisation, careful component analyses and possibly component redesign, and eventually component replacement earlier than anticipated.

Typical challenges

- Firing stability
 - Feed water pump flow stability
 - Minimum steam flow through turbines
 - Distributed Control System (DCS) programmable limitations
 - Control room operators must participate actively
- (Among others, challenges differ from power plant to power plant)