



Bundesnetzagentur

# **Report on Energy Supplies in Winter 2011/12**

**3 May 2012**

## Executive summary

- 1 The situation in the electricity grid in the winter of 2011/2012 was severely strained.
- 2 In addition to the scenarios depicted by the Bundesnetzagentur in its report of 31 August 2011, the unexpected shortfall in gas supplies in February 2012 put added strain on the electricity networks and required additional measures to be taken by the transmission system operators in order to maintain system security.
- 3 Moreover, also in February 2012, exceptionally large deviations from the forecasts led to the system balancing energy reserves being exhausted, forcing the transmission system operators to take additional measures. In order to improve the forecasts, the Bundesnetzagentur will create appropriate incentives by adjusting the portfolio balancing energy pricing system.
- 4 Biblis commenced phase-shift operations in February 2012, which provided the expected relief in terms of maintaining voltage.
- 5 The German and Austrian reserve power plants were called upon on more than one occasion. In some cases they provided relief to the lines, in others they allowed the exhausted system balancing energy to be replenished. The reserve power plants will be required to a similar degree next winter too.
- 6 The situation regarding power plants has developed detrimentally. Planned construction is experiencing delays. Decommissioning of further conventional power plants cannot currently be justified in Germany. Regulatory and legislative measures are required in order to prevent decommissioning of conventional generation plants. If additional plants in the south of Germany are decommissioned despite this, the need for reserve plants will rise accordingly. Furthermore, the need for capacity mechanisms should be examined closely in the medium term.
- 7 If more electricity from renewable sources is sold than can be transported by the network, this results in added strain on the network via corresponding price signals, as the conventional plants are demoted in the Merit Order and additional exports from Germany appear on the single market. In the opinion of the Bundesnetzagentur, the existing legal framework has scope for measures from the transmis-

sion system operators to limit sales to volumes that can actually be transported. Nevertheless, normative clarification would seem to be advisable.

- 8 Cooperation between network operators in the electricity and gas sectors needs to be improved in order to reflect the growing importance of the gas power plants and thus their gas supply for the security of the electricity grid. Amendments to the legal framework are also recommended here.
- 9 There are no effective technical measures which could act as a substitute for grid expansion. Consistent use of the instruments introduced to accelerate grid expansion is necessary.
- 10 The natural gas supply limitations in February 2012 laid bare the weak points in the networks. While there is a need for action in the gas networks, this is fortunately considerably less acute than the need in the electricity networks.