# Planning and implementation of network maintenance and expansion Audit of Swissgrid AG

## **Key points**

The Swiss Federal Audit Office (SFAO) carried out an audit of Swissgrid AG on the subject of planning and implementation of network maintenance and expansion, and also made observations on the topic of the protection of critical infrastructure.

In terms of content, the audit focussed on the foundations and instruments of Swissgrid AG for formulating and implementing the technical multi-year plan and the maintenance of route and system infrastructure for the 380 kV / 220 kV / 50 Hz transmission network. The ownership of this portfolio worth CHF 2.1 billion was transferred to Swissgrid in recent years and it has a network investment requirement of CHF 180 million in the 2016 budget. According to Swissgrid's technical multi-year plan, investments on a comparable scale can be expected in the next few years.

In summary, the audit produced a largely positive result.

#### The takeover of the transmission network will be concluded in 2016

The takeover of the transmission network from the previous owner has almost been concluded. The final phase is to be carried out in 2016. The small gap in the portfolio which still remains at present will not have any noteworthy adverse effect on investment planning.

The information on the status of the portfolio justifies the measures concerning maintenance in particular. Prioritising these measures leads to the annual investment requirement, which has been technically proven and estimated in terms of cost.

#### Strategies, concepts and approaches are mostly binding and operationally harmonised

In the planning of maintenance and expansion measures, it was apparent that strategies, concepts and approaches had to a large extent been bindingly established and were coordinated with the operational regulations. Moreover, a largely stable situation was found concerning the requirements, processes and tools introduced.

The application of the instruments for the multi-year plan and for maintenance takes place expediently. Even though there is some potential for improvement, there is a good basis upon which to further develop what has already been achieved.

## From today's standpoint, the financing for network investments has been secured

The investment requirement for the network investments planned by Swissgrid (line and substation projects, and network expansion, replacement and maintenance) seems plausible according to the 2016 budget and 2017-2020 medium-term plan. This financing has been secured as things currently stand.

The SFAO made recommendations to Swissgrid regarding the weaknesses identified related to data adoption and critical infrastructure

The takeover of the network also includes extensive data and document adoption. Various activities are under way with regard to the qualitative adjustment and harmonisation of the data. Up to now, a binding timeframe for the conclusion of these activities has not been given by Swissgrid.

In connection with the challenges regarding the protection of critical infrastructure, only an occasional clarification has been possible between the regulator and the distribution network operator. Swissgrid has not yet included this topic in a sufficiently binding manner in its regulations.

# Original text in German