



## Press release

### TRANSMISSION SYSTEM OPERATORS SUBMIT GRID DEVELOPMENT PLANS 2025

- **Six-week consultation period for the GDP and O-GDP launched**
- **Measures of Federal Requirement Plan (Bundesbedarfspan) still necessary despite changes to basic conditions**
- **Offshore grid expansion allows for current governmental expansion targets**

Today, the transmission system operators 50Hertz, Amprion, TenneT and TransnetBW published the first draft of the Grid Development Plan (GDP) 2025 and the Offshore Grid Development Plan (O-GDP) 2025 on their website [www.netzentwicklungsplan.de](http://www.netzentwicklungsplan.de). This marks the start of the public consultation phase in which all stakeholders are invited to submit their comments on the GDP and the O-GDP until 13 December 2015. Responses from the consultation process will be taken into consideration when drawing up the second drafts of the GDP and the O-GDP.

#### **Changes to basic conditions for network calculations**

The grid development measures for the GDP and the O-GDP have been developed based on six generation and consumption scenarios approved by the Federal Network Agency (Bundesnetzagentur; BNetzA). Four of these scenarios pertain to 2025 and two are in reference to 2035. These scenarios contain significant changes compared with previous years: in addition to peak capping for onshore wind and photovoltaic power facilities and the restriction of CO<sub>2</sub> emissions, the scenarios now also incorporate the new framework conditions resulting from the reform of the German Renewable Energy Act (EEG). Furthermore, the network calculations also factor in the key

#### **PRESSEKONTAKT:**

**Dr. Andreas Preuß**  
Telefon: 0231 5849-13785

**Ulrike Hörchens**  
Telefon: 0921 50740-4045

[presse@netzentwicklungsplan.de](mailto:presse@netzentwicklungsplan.de)



Berlin, 30 October 2015

Page 2 of 4

issues for reform, as determined by the coalition agreement made this July.

### **Federal Requirement Plan measures still necessary even after changes to basic conditions**

The calculations for the GDP 2025 indicate that the measures stipulated by the Federal Requirement Plan are still robust, even when considered in light of the changed framework conditions. These measures include the three extra-high voltage direct current transmission lines Ultranet, SuedLink and the South-East Passage. The scope of the grid development measures shows a slight increase in comparison with the previous GDP.

Within the six scenarios, the important drivers for long-range power transmission are the expansion of wind power capacity onshore both in coastal regions and at sea as well as the exchange of energy with other countries.

The volume of grid enhancement along existing routes (recabling or circuit requirements, construction of a more efficient power line along existing routes) amounts to approximately 5,900 kilometres of transmission lines (GDP 2014: 5,300 km). The required level of new power line route expansion is calculated at 3,300 km, (GDP 2014: 3,600 km), of which approximately 2,200 km are direct current corridors (including the direct current interconnectors connecting Belgium, Denmark, Norway and Sweden with an onshore length of around 220 km). The provisional volume of investments over the next ten years for these grid development measures totals between 22 and 25 billion euro. If the direct current transmission links between Emden/Ost - Osterath, from Saxony-Anhalt to Bavaria and the SuedLink route are to be completed using only underground cables, then the estimated costs are predicted to increase to between 31 and 36 billion euro.

**PRESSEKONTAKT:**

**Dr. Andreas Preuß**  
Telefon: 0231 5849-13785

**Ulrike Hörchens**  
Telefon: 0921 50740-4045

presse@netzentwicklungsplan.de



Berlin, 30 October 2015

Page 3 of 4

### **Alternative end point for direct current route from Saxony-Anhalt to Bavaria and load relief of Grafenrheinfeld grid node**

With a view to the key issues decided upon by the governmental coalition in July, the GDP also considers two options for the direct current route between Saxony-Anhalt and Bavaria. This includes calculations for using either Gundremmingen as an alternative end point or Isar, both of which thus waive the need to construct new alternating current routes in the Grafenrheinfeld area. These calculations show that in both versions, the demand for expanding the alternating current line routes would be less than in the comparison scenario, whilst the demand for regional grid enhancement measures would increase slightly.

In order to relieve load from the Grafenrheinfeld grid node, the governmental coalition has asked the transmission system operators to develop alternatives so that both of the planned new construction projects Mecklar - Berggrheinfeld/West (labelled P43 in the GDP) and Altenfeld - Grafenrheinfeld (P44) can be cancelled. The GDP indicates that this is achievable if the existing extra-high voltage power lines Mecklar – Dipperz - Urberach (P43mod) and Altenfeld – Würzgau - Ludersheim (P44mod) are reinforced instead. However, this would shift the regional load of the energy network within southern Germany. Furthermore, if current flows continue to increase, as a result of the expansion of renewable sources of energy for instance, it is likely that more grid enhancement and expansion measures are to be expected in the future.

### **Current governmental expansion targets determine expansion of the offshore grid**

According to the O-GDP, by 2025, the need to expand the offshore grid will have reached 3.2 gigawatt and 902 km, representing a reduction of almost 1.2 gigawatt less than indicated in the O-GDP 2014. The demand for grid expansion allocates 2.7 gigawatt of power and 712 km of routes to the North Sea region (three connection systems) and likewise attributes 0.5 gigawatt of power and 190 km of routes to the Baltic Sea region (one connection system). The total volume of investments for the next ten years totals around seven to ten billion

#### **PRESSEKONTAKT:**

**Dr. Andreas Preuß**  
Telefon: 0231 5849-13785

**Ulrike Hörchens**  
Telefon: 0921 50740-4045

presse@netzentwicklungsplan.de



Berlin, 30 October 2015

Page 4 of 4

euro, including investments of around five billion euro in expansion measures for the starting offshore grid. The volume of investment has therefore decreased in comparison with the previous O-GDP. This is a result of the redrafted expansion goals for offshore wind energy implemented by the German Federal Government in 2014 coupled with the successful completion of several connection systems.

Supplementary to previous connection concepts based on precise clusters, the plan also investigates the use of collection platforms in the Baltic Sea for the connection of multiple clusters that are geographically close together. In addition to cost benefits, this concept also includes the opportunity to further reduce idle capacity and the ability to react with greater flexibility to future developments.

Further information can be found at [www.netzentwicklungsplan.de](http://www.netzentwicklungsplan.de)

**PRESSEKONTAKT:**

**Dr. Andreas Preuß**  
Telefon: 0231 5849-13785

**Ulrike Hörchens**  
Telefon: 0921 50740-4045

[presse@netzentwicklungsplan.de](mailto:presse@netzentwicklungsplan.de)