Fact Sheet

Berlin, 16 April 2014

THE OFFSHORE GRID DEVELOPMENT PLAN 2014
CONTENTS, CONSULTATION, NEXT STEPS AND FACTORS INFLUENCING THE GRID DEVELOPMENT

The Offshore Grid Development Plan 2014
The Offshore Grid Development Plan (O-GDP) draws together the development of the overland transmission network, the spatial planning at sea and the basic technical conditions to create a basis for sustainable planning, including detailed information on the properties, time scheduling, execution times and costs of the measures necessary for the next ten and twenty years respectively. The Offshore Grid Development Plan investigates the demand on the grid connection system and determines the start and end points of grid connection systems, taking into account the expected geographic distribution of the offshore wind farms and the grid connection capacities available at the grid connection points in the transmission network. Specific line corridors are not identified within the scope of the O-GDP, but are determined as part of federal sectoral planning by the Federal Maritime and Hydrographic Agency (*Bundesamt für Seeschifffahrt und Hydrographie*) for the exclusive economic zone and by the Federal Network Agency in cooperation with the respective German states for German coastal waters.

The Offshore Grid Development Plan 2014 is based on the scenario framework approved by the Federal Network Agency on 30 August 2014. In light of the planned modifications of the goals for energy policy as laid out in the coalition agreement of the current German government as well as the key points of the German Renewable Energy Act reform (*EEG-Reform*), it would appear that, in contrast to the Offshore Grid Development Plan 2013, it is no longer appropriate to label one Scenario (e.g. Scenario B 2024 or A 2024) as a “lead scenario” and designate its network as the result of the Offshore Grid Development Plan.

The volume of offshore grid expansion needed is calculated at 1,135 km in Scenario A 2024, 1,605 km in Scenario B 2024 and up to 2,540 km in Scenario C 2024. The total transmission capacity of these extensions to the offshore grid would be sufficient for an additional 3.7 GW in Scenario A 2024, to 5.1 GW in Scenario B 2024 and up to 7.9 GW in Scenario C 2024.

The investment costs for the network measures are calculated in the Offshore Grid Development Plan on the basis of specific cost estimations and are of a provisional nature. Depending on the scenario, the total volume of investments over the next ten years totals between 17 and 23 billion euro. This already takes into accounts investments of approximately twelve billion euro for the starting grid offshore.

Offshore Grid Development Plan 2014 Public Consultation
Together with the first draft of the Power Grid Development Plan (GDP), the first draft of the Offshore Grid Development Plan 2014 is available for public consultation between 16 April and 28 May 2014. During this period, all interested parties have the opportunity to submit written responses to both Grid Development

Plans. The transmission system operators (TSO) invite everyone to take part in the consultation process and look forward to plenty of active participation.

Responses can be submitted using the online consultation portal at www.netzentwicklungsplan.de, by e-mail to konsultation@netzentwicklungsplan.de or by post to the following address: Netzentwicklungsplan Strom, Postfach 10 05 72, 10565 Berlin. At the end of the consultation process, all objective responses for which publication consent has been given, will be successively published online at www.netzentwicklungsplan.de.

Next steps – continuing along the road to grid expansion
Over the course of several weeks, all responses received will be carefully reviewed by the transmission system operators. The O-GDP will then be revised based on these responses. The second draft of the O-GDP will include an overview in a summary that explains how the responses have influenced the plan. This will be published in summer 2014 and delivered to the Federal Network Agency. The Agency checks through the revised draft of the O-GDP and once again makes it available for public consultation together with an environmental report.
The Federal Network Agency takes the results of the participation by the public and authorities into consideration when approving the Grid Development Plans.

At least every three years, they submit the approved Grid Development Plans to the German government. These form the basis of the draft for a Federal Requirement Plan. On their part, the federal government is obliged to present such a draft at least every three years to the federal legislative authorities to be voted upon.

Report on factors influencing grid development 2014
The German Federal Network Agency asked the transmission system operators to investigate the impact of two factors influencing the grid development on the measures included in Scenario A 2024 of the Grid Development Plan 2014. These factors (*Sensitivitaeten*) are as follows:

- offshore capping (factor 1)
- injection management (factor 2)

Alongside the Offshore Grid Development Plan and the Power Grid Development Plan 2014, the TSOs also publish the results of these investigations in the paper entitled “Report on factors influencing the grid development 2014; offshore capping and injection management”.

These factors also provide additional advice about how changes to certain political conditions could affect the grid development. Thus, the TSOs make a significant contribution to the current debate on EEG reform. However, these factors influencing grid development cannot provide anything more than additional indicators and do not allow for the investigation of a new, to-be-confirmed target grid.

The transmission system operators published the report on factors influencing grid development 2014 on 16 April 2014 online at www.netzentwicklungsplan.de. Furthermore, the transmission system operators are also investigating a third factor, the results of this are expected to be published at the end of June. They are looking at the effects of a significantly higher price for CO_2 emissions certificates, based on Scenario A 2024.

Results of analysing factors which influence grid development
Factor 2 was calculated based on Factor 1. However, these factors cannot be seen as anything more than additional indicators and do not allow for the investigation of a new, to-be-confirmed target grid in terms of the Grid Development Plan as only the effect of varying two parameters with regard to Scenario A 2024 was investigated. Certain measures could not be identified under the assumed conditions. However, this does not mean that these measures can be permanently dispensed with. Demand would only be postponed due to the continuing progress in the development of renewable energy sources. All HVDC corridors can be satisfactorily detected under the constraints of these factors.

Invitation to comment on the factors influencing the grid development
Interested members of the public have the opportunity to submit written comments to the factors influencing the grid development between 16 April and 15 July 2014. Comments can be submitted using the online consultation portal at www.netzentwicklungsplan.de, by e-mail to sensitivitaeten@netzentwicklungsplan.de or by post to the following address: Netzentwicklungsplan Strom, Stichwort “Sensitivitaeten”, Postfach 10 05 72, 10565 Berlin. The transmission system operators will then review all comments they receive. However, unlike the procedure for the Offshore Grid Development Plan, these will not lead to a revised draft of the report on factors influencing the grid development. Instead, the transmission system operators will present and discuss the results of the public consultation at a subsequent dialogue event. All objective comments for which publication consent has been given, will be successively published online at www.netzentwicklungsplan.de.

Legal Basis
Since 2012, based on the amended Energy Industry Act, the four transmission system operators 50Hertz, Amprion, TenneT and TransnetBW have shared the task of drawing up a Power Grid Development Plan for the expansion of the overland German transmission networks over the next ten and twenty years. Wind power from the North and Baltic Seas is set to make a significant contribution to the energy supply from renewable sources. In 2014, the O-GDP was published so as to facilitate an efficient and sustainable expansion of the grid within the statutory framework. Like the GDP, this is prepared annually and presented to the German Federal Network Agency as the regulatory authority responsible. Prior to the preparation of the O-GDP, a so-called scenario framework is created, which uses three scenarios to describe the range of possible developments in energy consumption and generation as well as the regional distribution of these; this forms both the foundation for the GDP and the targets of the German government.