

In harmony with nature: New initiative promotes sustainable biotope management along power lines

- **VDE FNN publishes implementation guide on ecological power line management for the first time**
- **Result of cooperation between grid operators, Environmental Action Germany (DUH), nature conservation organization NABU and the Federal Agency for Nature Conservation**
- **Promoting biodiversity, improving the landscape and operating overhead lines safely at the same time**

(24.06.2024, Berlin/Frankfurt a. M.) The expansion of renewable energies also requires the construction of new power lines. However, overland power lines usually mean an impact on nature. But operational safety and environmental protection do not have to be mutually exclusive. In order to make route management more environmentally friendly, the VDE Network Technology/Network Operation Forum (VDE FNN) has now developed the first implementation aid for ecological power line management. NABU, DUH and the Federal Agency for Nature Conservation were also involved as expert groups. The VDE FNN note [Ecological power line management - framework conditions, fields of action, measures](#) (in German) serves network operators as an information basis for electricity line maintenance. The new information can also be used to make existing routes, which make up the majority of routes, more attractive for animals and plants.

Risk to power supply due to excessive vegetation or falling trees

Line and operational safety is the top priority for a safe and reliable power supply. It is important to avoid the risk of power outages caused by falling trees, for example. In route management, grid operators regularly check the power line routes and maintain the vegetation. Poles and

conductor cables must remain accessible so that maintenance work can be carried out without further effort or other route maintenance. In the event of an accident, masts and conductor cables must be accessible without major effort.

Reptiles and dry grassland: Light and heat-loving species on the power line

The new note on ecological power line management shows for the first time how operational safety and nature conservation can go hand in hand. Measures are recommended for existing routes as well as new and replacement routes. In addition, the term "ecological route management" is defined and differentiated from "conventional route management". Case studies that have already been implemented by some network operators are listed and made available as an overview. The list of examples shows where species-rich route biotopes have been created. By carefully removing woody plants, routes can be deliberately designed to create habitats for light and warmth-loving species. Another option is to leave low shrubs and trees standing as far as possible. In one example, a herd of goats successfully took over the annual maintenance of a stretch of around two kilometers.

Successful nature conservation measures must not make future grid operation more difficult

VDE FNN Managing Director Heike Kerber: "Power lines always mean cuts to the environment. At the same time, power lines offer opportunities for biodiversity. Ecological route management promotes the establishment of diverse species, protects the soil and beneficial organisms and ensures the operational safety of the lines. For the broad acceptance and application of ecological route management by network operators, it is important that successful measures, such as the establishment of rare species, do not hinder future network operation."

About VDE FNN:

The Network Technology and Operation Forum within VDE (VDE FNN) develops the electricity grids with foresight. The aim is to ensure reliable system operation at all times with 100 percent renewable energies. VDE FNN makes innovative technologies practicable and provides answers to the grid technology challenges of tomorrow. Here, various specialist groups with different interests work together on solutions. Its members are over 480 manufacturers, grid operators, suppliers, system operators, authorities, and scientific institutions.

For more information, visit www.vde.com/fnn

About VDE:

VDE, one of the largest technology organizations in Europe, has been regarded as a synonym for innovation and technological progress for more than 130 years. VDE is the only organization

in the world that combines science, standardization, testing, certification, and application consulting under one umbrella. The VDE mark has been synonymous with the highest safety standards and consumer protection for more than 100 years.

Our passion is the advancement of technology, the next generation of engineers and technologists, and lifelong learning and career development “on the job”. Within the VDE network more than 2,000 employees at over 60 locations worldwide, more than 100,000 honorary experts, and around 1,500 companies are dedicated to ensuring a future worth living: networked, digital, electrical. Shaping the e-dialistic future.

The VDE (VDE Association for Electrical, Electronic & Information Technologies) is headquartered in Frankfurt am Main. For more information, visit www.vde.com

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