

Help shape the PFAS regulation – keep the energy transition on track!

The European Chemicals Agency (ECHA) has submitted a draft regulation on PFAS (per- and polyfluoroalkyl substances) for comment. This proposal bans or restricts the future production, marketing and use of these substances.

PFASs include around 10,000 different substances. Due to their special properties, they are used in a wide variety of applications, processes and products.

The trigger for regulation is that some of these PFAS are suspected of being carcinogenic. In addition, these compounds can be chemically very stable and they degrade only slowly. Some PFASs can accumulate in the environment and in human and animal tissues.

The regulatory proposal provides for a transition period of 18 months and application-related exemption rules for 5 or 12 years or, in very few cases, indefinite use. For the important area of energy technology, no exemption rules are known yet, but these are necessary for the safe operation of the energy infrastructure.

VDE FNN supports a regulation of PFAS, but demands their proper design:

- **Do not jeopardize implementation of the energy transition**
- **Bestehende Infrastrukturen erhalten und nachhaltig nutzen**
- **Sufficient transition periods needed to identify and develop new products**

About the Forum Netztechnik/Netzbetrieb im VDE (VDE FNN)

470 manufacturers, grid operators, utilities, authorities and scientific institutions are organized in the Forum Netztechnik/Netzbetrieb (VDE FNN) to further develop Germany's power grids with foresight. The goal is secure system operation at all times with 80 percent renewable energies.

Do not jeopardize implementation of the energy transition

Planned amendment/new regulation

PFAS chemicals have properties that are necessary and advantageous for durable products in power engineering. For this reason, all distribution or transmission system operating equipment available on the market today probably contains PFAS in varying amounts or PFAS is used in the manufacturing process. However, all these products are indispensable for the time-amitoned implementation of the energy transition.

Already today, there is a tendency that the market availability of products and equipment is decreasing. A PFAS ban would further reduce the market availability of products and plants.

Impact/consequence

The goal of the EU-COM to restrict the use of PFAS in this way is in conflict with the goal of the "Green Deal" and "Fit for 55". The energy transition must not be slowed down by the regulation of PFAS, but both must be coordinated.

Proposal/amendment

PFAS in energy technology must not be banned across the board and completely, but rather an application-related consideration should be made depending on the potential risk to human health, the environment and the availability of alternative products. Applications in energy technology that do not exhibit bioavailability must continue to be possible. Their use is documented and the controlled, proper disposal of the products at the end of their service life is also documented.

Bestehende Infrastrukturen erhalten und nachhaltig nutzen

Planned amendment/new regulation

The proposed PFAS ban restricts the availability of spare parts and auxiliary materials for the maintenance, repair and expansion of existing equipment in the power grids.

For the maintenance and repair of the equipment, solids (e.g. sealing rings), liquids (e.g. lubricants, paints) and gases (e.g. alternatives to SF₆), all of which are expected to contain PFAS due to the required properties (water repellent, temperature resistant, lubricity, etc.), are generally used. Replacing individual components with alternative products will require extensive testing of the entire device. These tests will not be possible for old equipment, some of whose manufacturers have already left the market, so that a ban on PFAS would make this existing equipment useless and no longer operabl

Impact/consequence

If the maintenance and servicing of the operating equipment is not possible due to the lack of spare parts by the PFAS regulation, there is an increased risk of accidents or unplanned supply interruptions. The operator can then not meet his legal obligations with regard to occupational safety and traffic safety.

As a result, operators would be forced to replace plants on a large scale before their technical and economic end of life. This replacement is not sustainable and also not feasible due to a lack of personnel

and economic capacities in addition to the already ongoing expansion of the energy infrastructure. The current proposal to ban PFAS even in spare parts would therefore directly delay the energy transition.

Impact/consequence

The infrastructures existing at the time of a ban on PFAS must be able to continue to operate without restriction until their technical or economic end of life. Premature replacement is not sustainable and not possible within the transitional periods envisaged.

The required spare parts and auxiliary and operating materials should not be subject to any restriction by a PFAS regulation.

In the context of a regulation of PFAS, the disposal procedures for products containing PFAS must also be made practicable.

Sufficient transition periods needed to identify and develop new products

Planned amendment/new regulation

The draft for the regulation of PFAS provides for a basic transition period of 18 months. Only in special cases are exemptions with longer periods of 5 or 12 years to be specified. The envisaged transition period is not sufficient for users to identify affected products and equipment in power engineering. Only in rare cases is it known for products which PFAS are used in them, e.g. PTFE nozzles of circuit breakers or fluoronitriles as insulating gas. For example, individual parts such as gaskets, paints, hoses, insulating pieces may contain PFAS. It is particularly difficult to determine if PFASs were used as coatings or auxiliary materials in the manufacture of products and remain in the products as a result of the process.

Impact/consequence

For the reasons explained, identifying the affected products will be very time-consuming and will not be possible in 18 months. Experience has shown that it can take up to 10 years or more to develop new products to the point where they are ready for series production and their qualification by the user, depending on their complexity.

Impact/consequence

The transition periods may not start until the products affected by PFAS regulation have been identified.

So far, hazardous substances are recorded in the REACH register due to European laws. PFAS used in the energy sector must therefore also be included in the REACH register.

Mandatory labeling of products by manufacturers will help users to identify PFAS-containing products more quickly and, where available, to replace them with alternative products.

An extension of the deadlines is necessary so that users can identify products containing PFAS that are in use, manufacturers can redevelop replacement products and bring them to production readiness, and so that these products can be qualified by the user. More extensive exemptions are needed, especially if there are no usable alternatives.

A whitelist for alternative substances to PFAS for use in energy technology can provide investment security for manufacturers and users and thus accelerate their use.

Stand: August 2023

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