

Securing the achieved level and, where efficiently possible, suitably expand

In October 2018, an amendment to the European Ecodesign Directive in the form of a "Working Document on a Commission Regulation implementing Directive 2009/125/EC with respect to small, medium and large power transformers" has been provided for transformers (see Attachment 1). Since this document is an amendment, all unlisted passages of the 2014 Regulation remain unchanged.

As a national regulator and as a recognized platform for network technology and network operation, the relevant expert groups of the Forum Network Technology/Network Operation at VDE (VDE|FNN) develop rules according to a transparent and non-discriminatory procedure that act as accepted codes of practice and partly serve as the basis for the Technical Connection Rules for network operators. In addition to the national implementation of European Network Codes, the focus is on ensuring a safe system operation with an increased use of electricity from renewable energy sources. We therefore welcome the opportunity to comment at this stage of opinion formation and point out the following need for adjustment, with a request for consideration:

- **Addition of Table 1.6 in the Annex required**
- **Technical differences are to be considered**
- **The use of new transformer technology shall comply with national noise requirements**
- **Ensure efficiency gains when replacing transformers or stations one-to-one or by adequate involvement of network operators**
- **Competitive distortions shall be avoided**
- **Early involvement of the relevant expert groups**

About the Forum Network Technology/Network Operation at VDE (VDE|FNN)

The Forum Network Technology/Network Operation at VDE (VDE|FNN) proactively develops technical requirements for the operation of power grids. The aim is to ensure safe system operation at all times with an increased use of electricity from renewable energy sources.

Addition of Table 1.6 in the Annex required

Planned modification/new regulation:

On page 5, in (2) (b), there is an increase to 400 kVA.

Consequence/result:

Therefore, it is necessary to adjust Table 1.6 in the Annex accordingly.

Suggestion/proposal of modification

Include the respective addition in Table 1.6 in the Annex.

Technical differences are to be considered

Planned modification/new regulation:

Under the heading “Review”, the subject of “technology-neutral” is addressed on page 7, second dash.

Consequence/result:

This formulation ignores the technical differences between liquid-filled transformers and dry-type transformers. Both types of transformers have their reasons for existence and their respective application cases.

Suggestion/proposal of modification

It shall be taken into account that liquid-filled transformers and dry-type transformers cannot be treated in the exact same manner due to their technical design.

The use of new transformer technology shall comply with national noise requirements

Planned modification/new regulation:

Under the heading “Review”, the subject of “noise” is only addressed briefly on page 7, sixth dash.

Consequence/result:

At the moment, no noise-related problems will be expected within Tier 2. Nevertheless, different requirements shall be observed in the various application cases (residential, commercial and mixed use areas). In Germany, especially in residential areas, the operation of devices with high noise immissions is prohibited by law (point 6.1 of TA Lärm (German Noise Prevention Code)).

Suggestion/proposal of modification

The national noise requirements of the TA Lärm shall continue to apply and shall not be subject to impairment by the use of new transformer technologies.

Ensure efficiency gains when replacing transformers or stations one-to-one or by adequate involvement of network operators

Planned modification/new regulation:

In the Annex, on page 1 under (a) (i), additions are made which require the manufacturer to provide certain information even though this depends on customer data. It is important to check for profitability.

Consequence/result:

Due to this fact, the bureaucratic effort to use Tier 1 transformers will be very high and sometimes not practicable. The requirement that the manufacturer shall state in the documentation where Tier transformers have been installed is not useful. Therefore, two examples are given for further explanation:

- Example 1: Replacement because of a defective transformer
For these application cases, backup transformers shall be provided in advance for the case of a breakdown. Consequently, an indication of the future place of installation or type of station is not possible.
- Example 2: In general, purchase normally takes place by means of framework contracts on the basis of Technical Specifications.
Requirements regarding dimensions, etc. shall represent compromise solutions to allow the use in as many existing stations as possible and thus a profitable purchase of the required number of transformers. The specification of special transformers for each single type of station or the separate purchase for each individual application case would make an economic feasible purchase impossible. Therefore, a more pragmatic approach is needed.

Suggestion/proposal of modification

The demonstration of inefficiency or technical impossibility of compliance with the "Tier 2" or the "Tier 1" requirements should not be made by the manufacturer, but by the user of the transformer, i.e. usually by the network operator, because he knows - in contrast to the manufacturer - the exact installation place of the respective device and the associated factors that lead to inefficiency or technical impossibility.

The possibility of exemptions for lower efficiency requirements (subsequent use of Tier 1 transformers) at disproportionately high costs in the context of a one-to-one replacement shall be maintained.

In addition, the application case regarding the one-to-one replacement of an entire station shall be included in terms of economic proportionality. Therefore, the same criteria as for the one-to-one replacement of a transformer in an existing station could apply.

In order to allow for transparent profitability testing, a suitable definition of the required profitability calculation by the market surveillance is demanded.

Competitive distortions shall be avoided

Planned modification/new regulation:

In the Annex, the subject of review is addressed on page 7 under (3).

Consequence/result:

The corresponding feasibility by the market surveillance is difficult, as it requires performance measurements that require appropriate equipment, a testing environment and trained personnel.

Suggestion/proposal of modification

The regulations and tests provided by the market surveillance shall also apply to manufacturers outside the European Union, as it would otherwise lead to inequality and consequently cause competitive distortion.

Early involvement of the relevant expert groups

Planned modification/new regulation:

When reviewing the current Ecodesign Regulation, the relevant expert groups, such as network operators, should already get involved at an early stage.

Consequence/result:

This ensures an adequate elaboration in compliance with specified targets.

Suggestion/proposal of modification

For a Tier 3 level, the relevant expert groups, such as network operators, shall get involved in possible preliminary studies.

Attachment

EU COMMISSION REGULATION (EU) .../...of XXX
amending Regulation (EU) No 548/2014 of 21 May 2014 on implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to small, medium and large power transformers (including annex)

December 2018s