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Feedback on Commission Proposal COM(2021) 559 for a recast Directive on Energy efficiency

Fit for 55 Package



CURRENT

Enabling Network Technology
throughout Europe

CurrENT is the industry association representing innovative network technology companies in Europe. Our members offer solutions that climate-proof existing power networks and add innovative elements to the new ones that are yet to be built. Power networks can be optimised and reinforced through these solutions, and additional networks can start off with the latest state-of-the-art technology. Our solutions enable power networks to deliver the energy transition at least cost; faster; and in a secure, sustainable and socially responsible manner. We aim to generate greater awareness of new grid-enhancing technologies and to accelerate their implementation by working collaboratively with the broader stakeholder community. Our Vision is a European power network – transmission and distribution – that is the recognised world leader in enabling decarbonisation through the efficient use of modern grid technology.

Introduction

CurrENT would like to commend the EU for passing the European Climate Law, enshrining into law its objective to become climate neutral before 2050 and reducing its greenhouse gas (GHG) emissions by at least 55% before 2030. Likewise, the Commission must be commended for responding rapidly, by forwarding its Fit for 55 package of proposals for the Union to enact the necessary regulatory tools to achieve the reductions in emissions for the EU and its Member States to comply with their commitments under the Paris Agreement.

General comments – Energy Efficiency in Electricity Grids

Decarbonisation requires a transformation of Europe’s energy sectors unparalleled to anything in history in terms of scale, impact and pace. Energy accounts for 75% of EU greenhouse gas emissions.

Supplying carbon-free electricity and electrifying heat and transport, to the greatest extent practicable, are preconditions for decarbonising Europe’s economies.

Greater electrification is crucial for achieving efficiency gains in the energy sector, and it must be based on renewables. Despite a golden period of growth for renewable power in Europe over the past 15 years, electricity’s share of overall EU gross final energy consumption has remained unchanged at 24% for the past 15 years. It needs to more than double in order to reach Europe’s decarbonisation objectives, according to the Commission’s Strategy for Energy System Integration.

Europe needs dramatically increased power system capability and flexibility in the coming decades to accommodate renewables. This must be provided for by increased interconnection, innovative grid infrastructure and far better utilisation of existing, planned and future electricity grids, e.g. by deploying new grid enhancing technology.

Neither the Commission’s proposal for a recast Energy Efficiency Directive (EED) nor any other element of the Fit for 55 Package, adequately addresses the need to rapidly and dramatically change the way we operate our existing electricity grids and how we apply new, innovative grid technology. Such solutions

as dynamic line rating, modular power flow technology, and superconducting cable systems can play a crucial role in addressing the grid-barriers and inefficiencies in energy transmission that are already becoming apparent as we move towards an energy system, increasingly dependent on variable solar and wind power.

Article 3 Energy Efficiency First Principle

CurrENT strongly supports the Commission's proposal to providing a solid legal basis for applying the 'Energy Efficiency First Principle' (EEF Principle) to energy efficiency improvements and energy network operation, planning and investment decisions. It is important that the principle is reflected in cost-benefit methodologies and assessments and that its application by Member States is monitored and reported to the European Commission.

The implementation of the EEF principle must also be closely monitored and regularly reported on by both the National Regulatory Authorities and ACER, and reflected in the National Development Plans. The point-to-point approach to grid development, based on existing (HVDC) grid technology, will not deliver the Green Deal. Without innovation in network technology, and greater cross-border coordination, Europe will fail to deliver on its Paris Agreement commitment and achieve cost-effective and energy-efficient transition to decarbonisation before 2050.

We must apply grid enhancing technology to utilise existing grids more efficiently, while planning for less obtrusive and more environmentally friendly transmission and distribution technology. Innovative grid technology such as dynamic line rating, modular power flow technology, and superconducting cable systems are needed to unlock the current transmission backlog, overcome planning obstacles and address current technology deficiencies (e.g. low power intensities and high losses). For that to happen, effective application of the EEF Principle must be applied by all member states, NRAs and national as well as European grid infrastructure planning, including in the Ten-Year Network Development Plans, the identification of Projects of Common Interest under the TEN-E Framework and in funding programmes, e.g. under the Connecting Europe Facility.

Article 4 Energy Efficiency Targets

CurrENT supports the Commission's proposal to increase the targets for energy efficiency (final and primary energy consumption), in order to bring the EED in line with the greenhouse gas reduction commitments under the European Climate Law.

Article 25 Energy transformation, transmission and distribution

CurrENT supports the Commission's proposal to clarify and enhance the role of National Energy Regulators in implementing the Energy Efficiency First Principle in the planning, development, investment and operation of gas, and electricity transmission and distribution networks. However, there

is a need to clarify how the principle should be applied to ENTSO-E, ACER and the Commission in terms of validation and reporting.

It is proposed that NRAs shall include a section on energy efficiency progress in annual reports and “provide an assessment of network losses in the operation of the gas and electricity infrastructure, the measures carried out by transmission and distribution network operators, and, where applicable, provide recommendations for energy efficiency improvements.

In CurrENT’s view, the reporting requirement is inadequate. As CurrENT highlighted in its response to the consultation on the revision of the Energy Efficiency Directive 2012/27/EU, electricity grid energy efficiency should not only be about losses but also about the optimised use of existing and future grids. Implementation of extended measures of energy efficiency in grid planning and operation are needed. These should encompass grid losses as well as avoiding curtailment of low-cost in-feed from renewables. Focusing incentives on decreasing grid losses fails to incentivise CAPEX efficiency. Output-based approaches linked with benchmarking of current efficiency are a possible option to ensure “cost effective” energy efficiency from a system perspective.

The Commission proposal correctly recognises that “energy losses in energy transformation, transmission and distribution can be significant”. It also stresses the need for a uniform definition of energy losses within the Union, making it difficult to benchmark performance and compare networks and operators.

In this context, it is very difficult to understand why the Commission proposes to delete Article 15 (2a) in the existing directive which obliges the Commission to put forward “a common methodology in order to encourage network operators to reduce losses, implement a cost-efficient and energy-efficient infrastructure investment programme and properly account for the energy efficiency and flexibility of the grid”. The fact that the methodology was due almost a year ago is no reason to discard it.

CurrENT proposes that the text be reinstated, possibly with another due date. Furthermore, the needed methodology should not limit efficiency to technical and non-technical losses but must have a broader more holistic perspective including such system losses such as redispatch, curtailment and the cost of delayed networks to society. The Commission should also align the outstanding provision with the Smart Grid Indicator and the TEN-E update, to arrive at a consistent set of policy measures in the broader Fit for 55 measures and other regulatory updates.

While references to the EEF Principle correctly is given appropriate attention in the Commission’s proposal, more attention could be given in the recast EED to the application of the “Do No Significant Harm” principle, established by Regulation (EU) 2020/852 on the Establishment of a Framework to Facilitate Sustainable Investment¹. The Commission’s proposal only refers to it in Recital 50 (in relation to policy measures on energy savings obligations) and Recital 84 (in relation to efficient district heating and cooling).

¹ Article 17 of Regulation (EU) 2020/852 on the Establishment of a Framework to Facilitate Sustainable Investment, states i.a.:

“Economic activity shall be considered to significant harm the circular economy (...) where that activity leads to significant inefficiencies in the use of materials or in the direct or indirect use of natural resources such as non-renewable energy sources, raw materials, water and land at one or more stages of the life cycle of products, including in terms of durability, reparability, upgradability, reusability or recyclability of products;”

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CurrENT suggests that a reference is added in the articles of the recast Directive to the 'Do No Significant Harm' principle in a way that ensures that the Principle is applied to all gas, electricity transmission and distribution network planning, development and investment decisions.