To:
EU Energy Ministers
EU Energy Attachés

1st of March 2024

RE: Unlocking flexibility to reach our decarbonisation goals – the views of the power sector

Dear Ministers,

Eurelectric, the industry association of the electricity industry, welcomes that the key role of flexibility in the energy transition is duly recognised and put on the agenda of the Council. In the near future, our power system will rely heavily on renewable energy sources, particularly wind and solar, with roughly 70% of power generation expected to be renewable by 2030 and up to 87% by 2040.

As variable renewable energy becomes more dominant, the need for flexibility in the system grows substantially. A recent study by Eurelectric anticipates that the power system across EU will require between 531 and 782 TWh of flexibility to support variable renewable generation by 2050, roughly the annual power production of Germany. Meeting these needs will require a modernised electricity network infrastructure as well as increased flexible capacity and demand. This flexibility can come in a variety of forms:

- **Consumers and small businesses:** active engagement thanks to the optimised use of controllable appliances and assets like heat pumps, electric vehicles and batteries.
- **Industry and large commercial sites:** By rearranging their production or operation schedule in order to shift electricity consumption to times when prices are lower or to provide balancing services to the grid.
- **Power generation:** Dispatchable assets can be activated or deactivated quickly to cover system needs in case of a mismatch between supply and demand.
- **Energy storage:** Short and long-term duration technologies, like hydro pumped storage and utility-scale batteries, will serve as a key independent flexibility pillar.
- **Electrolyzers: at system friendly locations** can alleviate or eliminate congestion at all voltage levels.

In order to unlock the potential of flexibility, we recommend the EU and the Member States to:

1. **Implement recent market reforms and align price signals**: Swift implementation of the market provisions in the Clean Energy Package (CEP) and Electricity Market Design (EMD) will contribute with several useful elements: accurate assessment of different flexibility needs, long-term visibility for investors and incentives to foster more participation of flexibility services. We caution against mainstreaming measures that fix or regulate prices for consumers, which may inhibit their engagement in flexibility.
2. **Devise an energy storage strategy**: Storage capacity needs to grow almost by a factor 4 by 2030 – from 51 GW to 191 GW. To stimulate investment, a separate strategy is needed – in addition to implementing pending market provisions such as facilitating the participation of flexible capacities in capacity mechanisms and agreeing on an EU-wide methodology to assess the nature of stored electricity.
3. **Adopt an improved Network Code Demand Response:** The network code should foster market-based procurement of flexibility services and treat all resource providers on an equal basis and provide for adequate compensation of aggregation models.

In annex, we outline in detail what regulatory policy environment is needed to fully unlock flexibility. The electricity industry remains committed to its goal of powering a thriving, competitive, climate neutral European economy and stands ready to further clarify the points elaborated above.

Your sincerely,

Leonhard Birnbaum,
President, Eurelectric

Kristian Ruby,
Secretary General, Eurelectric

Annex – Policy environment to unlock the value of flexibility

The following are our policy recommendations which will facilitate meeting our flexibility needs on time:

1. Storage

In our position paper on enabling energy storage, we recommend the following measures to ensure the timely development and deployment of storage assets in Europe:

- ✓ Consider storage as a flexibility option when developing network plans & flexibility needs assessments
- ✓ Provide long-term visibility & predictability of revenues
- ✓ Make use of existing funding opportunities for the transition
- ✓ Build up energy storage capacity across Europe
- ✓ Develop an EU-wide methodology to assess the nature of stored electricity

2. Demand Response

System operators are currently working on a draft of the technical rules at European level which will foster the development of markets for demand response and other forms of flexibility. In order to unlock the highest flexibility potential, we have the following key recommendations for the network code:

- ✓ Ensure the development of market-based procurement of flexibility services as far as possible
- ✓ Ensure the Code treats all resource providers on an equal basis
- ✓ Aggregation models must consider compensation on the basis first of imbalance settlement and second on additional costs or benefits to market participants
- ✓ Accelerate the deployment of smart meters and electrification technologies in heating, transport and industry (wherever feasible)
- ✓ Ensure interoperability and controllability of flexibility-providing systems and control boxes.

3. Market design measures to support implementation of flexibility

The recent market design reform added some beneficial measures to help with the deployment of flexibility, particularly on the new assessments and support schemes Member States may apply. In order to have a flexibility-friendly market design, Eurelectric recommends:

- ✓ Expand the scope of system needs assessments to include firm, flexible, and network capacities to have a whole system perspective
- ✓ Implement the relevant articles to support the uptake of flexibility, notably articles 17 and 32 of the Electricity Directive and Article 3 of the Electricity Regulation
- ✓ When implementing flexibility support schemes in markets where capacity mechanisms are in place, it is advisable to better integrate flexible capacity within the capacity mechanism to prevent potential conflicts between instruments
- ✓ At the same time, avoid imposing fixed price contracts or regulated retail tariffs, which may mute signals and inhibit consumers' engagement in flexibility.

4. Distribution grids as a facilitator of flexibility

To ensure the most resource- and cost-efficient deployment of flexibility across European electricity networks, Eurelectric recommends:

- ✓ Ensure both physical reinforcement and digital optimization of grids by allowing grid operators a degree of manoeuvrability on DSO investment instruments. This includes removing regulatory obstacles at the national level regarding distribution grid investment, adopting an output-based remuneration scheme which fully considers CAPEX and OPEX, and where appropriate, implementing an agile reimbursement mechanism
- ✓ The option of flexible connection agreements must be available to system operators. A framework for the parameters of these agreements is needed, while specifics should be tailored to national/local specificities. In particular, the interaction between these agreements and market-based local flexibility procurement needs due consideration.