



15th EU-US Energy Regulators-Roundtable

**October 13-14, 2022
Washington, D.C. (USA)**

Closing Statement

Energy regulators from Europe and the United States met on October 13-14, 2022, in Washington, D.C., in the United States, for the 15th EU-US Energy Regulators' Roundtable to discuss common challenges and exchange best practices and experiences.ⁱ The event is normally held approximately every 18 months, but due to the Covid-19 pandemic, had not been held since March 2019. The event was organized jointly by the US and European associations of regulators, the National Association of Regulatory Utility Commissioners (NARUC), and the Council of European Energy Regulators (CEER).ⁱⁱ Also in attendance were representatives from the EU Agency for the Cooperation of Energy Regulators (ACER) and from US Federal Energy Regulatory Commission (FERC).

Topics at this meeting were focused on challenges and priorities around these themes:

- Session 1: Grid Resilience & Distributed Energy Resources
- Session 2: Clean Energy & Decarbonization
- Session 3: Electrification & New Technologies; Dynamic Regulation
- Session 4: The Energy Crisis & Mitigation Measures
- Session 5: Cybersecurity

Grid Resilience & Distributed Energy Resources (DER); Clean Energy & Decarbonization

As weather becomes more extreme, due to droughts, heat and wildfires, excessive rain and wind from hurricanes and derechos, or cold, ice and snow, utilities and regulators are looking at ways to ensure more resilient electric transmission and distribution systems. Participants discussed how and the extent to which customers and utilities can mitigate the impacts of power outages from extreme events through distributed energy resources, or DERs, such as solar and storage, electric vehicles capable of serving as energy storage, and community microgrids, to maintain life-saving power to homes and key community buildings.

It was noted that in many areas of Europe, new decarbonization targets, might challenge the maintenance of grid reliability as the generation mix might change in specific areas. DER such as rooftop solar can be a way to reduce demand on the grid and still fulfil these targets.

Specific examples from the U.S. western states were provided and described as a “very balkanized impact of weather on the utilities and on the grid.” Keeping the grid “self-resilient” is a key challenge. DERs, it was said, can help keep the lights on, on a more localized level.

Two of the more prevalent weather crises in the Western U.S. are droughts and wildfires. This has resulted in water feeding into dams drying up diminishing hydropower and potential destruction of electricity infrastructure.

Pre-emptive public safety power shutoffs are a recourse used by utilities in extreme circumstances but has consequences on the consumer, who require adequate notice to prepare for these events. Other customer measures are to put more DERs on homes and businesses, with community microgrids as an option for those who cannot afford it. Consumers are also making use of generators; however, the use of small diesel generators is not good for the climate.

Utilities' responses include isolating certain grid sections; adjusting reclosers' settings to trigger faster; and using drones to virtually look at lines; and replacing wood poles with steel poles and wrapping poles.

There was some concern that the benefits of DER in terms of reliability and resilience may be exaggerated; that the key to reliability is dispatchable generation. Concern was also expressed that there are various regions in the U.S. that have unreliable generation assets—that they will find themselves short (e.g., in the northeast) because of gas supply constraints and an overreliance on intermittent resources. In the context of the energy transition, the question of redundancy of generation assets will have to be addressed.

The EU's various plans and measures, from the Green Deal to REPowerEU to more recent crisis measures such as the Gas Storage Regulation and the very recent Regulation on an emergency intervention to address high energy prices were presented. These are powerful measures in terms of achieving decarbonization and dealing with the current crisis.

Discussions compared the various legislative and regulatory initiatives to decarbonize energy systems. An important take-away was to avoid focusing solely on electricity or gas, but to take the whole energy system into perspective. European and U.S. regulators presented circumstances and new challenges across various jurisdictions and shared best practices as well as what has not worked. Moreover, both sets of regulators expressed a strong desire to help educate and motivate consumers to make the best use of means such as advanced metering infrastructure (AMI) and engage in behaviors that are more grid-conscious. The price crisis in Europe would certainly be a game changer in terms of public awareness and demand response.

Also for discussion was the difficulty in needing to perhaps invest in new gas infrastructure to deal with the crisis and an end to reliance on Russian gas imports in Europe, while, at the same time, providing enough investor certainty for longer-term pay-back on such investments and avoiding stranded assets in the context of decarbonization targets.

Electrification & New Technologies; Dynamic Regulation

Key to this session was providing a shared understanding of dynamic regulation (DR): "A regulatory approach that is limited in time, focused on the energy sector activities it covers and/or the energy sector actors who can participate, and which aims to cope with some kind

of novelty in the energy system with the ultimate goal of informing future regulatory decision-making through experimentation.”

Common features for successful DR initiatives in Europe include ensuring a legal framework is in place, demonstrating clarity on objectives, and providing consumer protections. In looking at implementing Dynamic Regulation initiatives, some considerations presented include:

- ▶ **The primary aim:** To promote innovation and to inform future regulatory reforms.
- ▶ **The scope of activities:** Specific vs broad energy-related activities.
- ▶ **The provision of funding:** Which is needed to support the innovation.
- ▶ **The type of participants involved:** Transmission System Operators and/or Distribution System Operators (TSOs/DSOs), incumbent market participants, or new entrants.

U.S. regulators also stressed that for electrification to be successful, it is necessary to design programs that send the right price signals from the start.

- **Affordability:** New equipment needs to be affordable for consumers to purchase and electricity needs to be affordable for charging and, ideally, lower cost than substitutes like natural gas, oil, and gasoline.
- **Costs:** This necessitates being very judicious about what costs are socialized on electric bills, and what costs can be borne by other sectors of the economy.
- **Regulators’ Role:** The utility regulators need to keep the electric company focused on minimizing the cost of the power system.

Electrification is ready to go to scale, and the way we take it to scale matters for outcomes. It was pointed out that it is important to keep in mind that electrification is a means to decarbonization, and not an end in itself.

Because of severe climate-related impacts, including extreme heat, wildfires, ocean acidification, and reduced hydropower, several U.S. states are exploring plans to transition from natural gas to electricity for both home heating and transportation. Some cities have already banned natural gas in new buildings, while moves to reduce line extension subsidies are underway in certain areas.

For example, in the U.S., Washington state has already passed a sweeping law to reduce emissions by electric utilities, which must eliminate coal in their portfolios by 2025 and be net carbon neutral by 2030. State regulators are now working to provide recommendations on how to reduce the carbon emissions of its natural gas utilities.

The challenge (which may be seen in Europe as well): regulators must avoid stranded costs of existing infrastructure, ensure that there is sufficient electric generation to replace natural gas, that there is sufficient transmission to move it to load centers, and that the costs of the transition – including replacing furnaces and appliances – are managed in such a way that they do not fall disproportionately on lower-income customers.

Also presented and discussed were the challenges of avoiding that payment for negative externalities are all put on electricity customers when it is politically difficult to increase taxes on fossil fuel consumption. Insulation and equipment replacement (e.g. heat pumps) were also

discussed, as well as incentive mechanisms that can range from premiums to more sophisticated systems (green loans).

Energy Crisis: Assessment & Mitigation Measures

The issue of reliable and affordable energy supply is a priority for both U.S. and European regulators and has reached a crisis level in many regions. How the gas supply picture has changed dramatically in Europe was presented, noting:

- ▶ Necessity of new supply routes as flows have changed from east-west to west-east
- ▶ A dramatic decrease in Russian gas imports and concomitant growth in LNG imports
- ▶ Over the medium term, gas market tightness likely to stay
- ▶ The EU will compete for extra volumes with Asia, which will see growing demand, partly for overall economic growth, partly for lowering coal usage.

The energy crisis in Europe is not solely related to gas and the Russian invasion of Ukraine. The French nuclear fleet which represents about half of the installed nuclear capacity in Europe is producing much less compared to 2021, perhaps a 70-80 TWH gap year-on-year by the end of 2022. Drought also lowered hydroelectric output. One can see the change in that instead of gas flowing from Germany to France, it now flows from France to Germany, as well, of course, in the large increase in energy prices. Making cross-border electricity capacity available for trade (per also the so-called '70% target') will be vitally important for many EU Member States. This also includes Member States that are predominant electricity exporters over the year.

High prices do not necessarily indicate a market design problem but can be an expected market reaction to an extraordinary situation. The question to ask for now is not so much is the design right, but is an intervention on market design desirable? If not, governments take temporarily mitigating actions. The importance of the measures being temporary was stressed, as well as the need to protect competitiveness of companies.

Building on that European perspective, individual regulators offered insights on various emergency measures to mitigate the impact of the energy crisis; particularly as it affects consumers. These measures are focused on the winter season and security of supply and mitigation of high energy prices such as "tariff shield".

EU responses include short-term electricity market design adjustments and various options for acting on gas prices. The EU Energy Platform will play a key role in pooling demand, coordinating infrastructure use, negotiating with the international partners, and preparing for joint gas and hydrogen purchases. The Platform also looks to ensure cooperation in areas where it is more effective to act in a coordinated way at EU level rather than at national level. These areas include demand pooling; efficient use of EU gas infrastructure; international outreach.

Likewise, U.S. regulatory practices in times of crisis were presented, such as consumer education, public relations, rate making schemes (e.g., price caps or other), etc. In the U.S., since 2008, natural gas has become critical to electric power generation, with the demand for

natural gas electric power generation increasing steadily as coal power retires and to balance increasing shares of variable renewables.

Like in Europe, the U.S. is looking at rising residential gas prices throughout the year. Also, the U.S. has become a major exporter of liquefied natural gas and natural gas utilities provide a variety of energy assistance programs for customers. Finally, regulators discussed a bit the increased public focus on their work in a time of crisis/high prices.

Cybersecurity

Cybersecurity is another matter of universal concern, given the increasing efforts of malevolent state actors and their proxies, criminals and 'hacktivists'. The effects of massive successful cyber attack on energy infrastructure could have a devastating effect.

It was shared that the cyber security market in the EU is ever-growing, due to the constant emergence of cyber threats and those threats which can be the catalysts for developing new legislative and regulatory frameworks. European regulators have made efforts to better understand the state of cyber threats, including the creation of a Cybersecurity workstream in CEER some years ago. This workstream has carried out analyses for regulators help regulators prepare adequately and filling the gaps that impending legislation may solve. Regulators also discussed the importance of understanding the difference between Information Technology and Operational Technology cybersecurity. CEER has formulated a set of recommendations for its members covering several features considered as critical to developing a suitable cybersecurity environment and culture among European energy market actors. Training is an important part of cybersecurity, and it was noted that U.S. experts have participated in the cybersecurity training of European regulators.

In terms of legislation, the NIS (Network and Information Security) Directive 2.0 proposal is advancing. It is the first line of defense for cybersecurity in Europe for Energy and may be adopted by year's end (at the latest by Q1 of 2023). The regulation will enter into force immediately and will then take 18 to 21 months to be applied.

Like their European counterparts, protecting utility assets across the United States has become increasingly important. Cybersecurity issues include ransomware attacks, disruption of substations, and theft of consumer information. Regulators are working to ensure that the utilities maintain best practices.

U.S. regulators, such as those in the District of Columbia, require utilities to implement cybersecurity programs to safeguard the grid. However, there are a number of glaring differences between utilities that create various gaps in cybersecurity, such as the resources at utilities (e.g., a co-op vs. a Fortune 500 investor-owned utility), training protocols, and staff to properly review cybersecurity protocols. The implementation of best practices (e.g., multi-factor authentication, repeated testing for vulnerability, employee training, endpoint detection and response) address many, but not all, of the weakness.

As the grid becomes more decentralized and additional distributed energy resources and other technologies are added to the grid, cybersecurity standards will become increasingly important

to protect the flow of power across the nation. The issue of assessing the spending of utilities/system operators on cybersecurity was also discussed: regulators must ensure that such spending is correct and proportional, yet there are challenges in terms of the expertise to analyze the spending and confidentiality issues. Therefore, this session was important to allow European and U.S. regulators an opportunity to share strategic insights and best practices.

Next Steps

The European regulators made it clear that there would be no future reliance on energy resources from Russia, even after the war. Moving forward, it will be necessary to find other avenues to fill the void. On the U.S. side, it was emphasized that European countries should engage in expressions of interest to promote LNG exports (to the extent desired). Looking ahead, it will not be unusual to see 10- or 15-year LNG contracts instead of the traditional 20+ years, give the change in the global market.

Siting transmission infrastructure is an area that has been problematic in the Europe and the U.S. It is particularly important as siting for new generation facilities is easier when it is not geographically close to centers of demand. As resolving the issue of locating and building out new transmission in a timely manner is common for both, it will continue to be a focus of ongoing dialogues.

Customer engagement, equity, and education was another focal point of the conversations. Regulators identified priority areas (e.g., ensuring that rates are socialized equitably, timely information sharing, learning what motivates customers) and the need for more effective marketing and outreach mechanisms.

Overall, the roundtable discussions provided a necessary platform that facilitated open dialogues among regulators to discuss their regulatory initiatives, practices, and future challenges. Although broad priorities are shared across the EU and the U.S., there are varied challenges, approaches and insights to achieve these goals. This roundtable has the additional benefit of building international connections amongst regulators so that they can continue these dialogues beyond the confines of the two-day meeting. European and U.S. regulators also interact via other vehicles, such as publications and the working groups of the International Confederation of Energy Regulatorsⁱⁱⁱ (ICER) and the World Forum on Energy Regulation. It is quite likely that some of these topics will appear in future issues of the *ICER Chronicle*.

Notes to Editors

ⁱ On October 13-14, 2022, the [15th EU-US Energy Regulators-Roundtable](#) was held in Washington, D.C., European and U.S. energy regulators have, since the year 2000, maintained an informal dialogue to exchange views and experience on selected topics of mutual interest across the electricity and gas markets, compare regulatory approaches, and discuss international developments and cooperation. The EU-US roundtable is jointly organized by the Council of European Energy Regulators ([CEER](#)) and the National Association of Regulatory Utility Commissioners ([NARUC](#)), the associations representing national/state energy regulators in Europe and USA respectively. Regulators from the US Federal Energy Regulatory Commission ([FERC](#)) and the European Agency for the Cooperation of Energy Regulators ([ACER](#)) also participated in the roundtable.

ii Established in 2000, the Council of European Energy Regulators (CEER) is a not-for-profit association in which Europe's independent national regulators of electricity and gas voluntarily cooperate to protect consumers' interests and to facilitate the creation of a single, competitive, efficient, and sustainable internal market for gas and electricity in Europe (www.ceer.eu). Founded in 1889, the National Association of Regulatory Utility Commissioners (NARUC) is a non-profit organization dedicated to representing the state public service commissions who regulate the utilities that provide essential services such as energy, telecommunications, water, and transportation (www.naruc.org).

iii ICER brings together regulatory authorities for the energy sector from across six continents and over 200 regulatory agencies. ICER is composed of 12 regional regulatory associations as well as the regulatory authority for Australia. ICER's goal is to serve as an effective tool to help improve the public's and policymakers' awareness and understanding of energy regulation globally. More information and publications by ICER are available at www.icer-regulators.net.