

Comparison of FERC's Order No. 1920 and EFI Foundation Analysis

On May 13, the Federal Energy Regulatory Commission (FERC) sought to address a severe lack of transmission capacity in the United States when it adopted Order No. 1920, “[Building for the Future Through Electric Regional Transmission Planning and Cost Allocation](#).” FERC’s order plans for the long term, ensures that benefits outweigh costs when making large investments, and provides certainty and transparency in infrastructure investment decisions.

The EFI Foundation, through its [Energy Futures Finance Forum](#) (EF³), released the findings and recommendations of its report [Modernizing the U.S. Electricity Grid for Resilience, Load Growth, the Clean Energy Transition, and Energy Security](#) in April 2024. EF³ is focused on increasing the investment quality of decarbonization assets. This analysis sought to explore how a lack of transmission capacity hinders the ability to finance new clean energy and offer strategies for improving decisions about who pays for new transmission capacity.

A conclusion from EF³’s analysis was that the economic and reliability benefits of adding new transmission are often sufficient to justify investments in new capacity. Decarbonization is an added benefit, one that may be very important for meeting electricity load growth while meeting customer requirements. This finding may assuage concerns that transmission projects are simply a means to socialize the costs of state policies that support clean energy targets or attract specific industries like data centers.

At its core, FERC’s new transmission planning and cost allocation rule mirrors the three major conclusions from the EF³ analysis:

- 1) Long-term regional planning of transmission is crucial for ensuring access to reliable, affordable, and clean power.
- 2) Transmission benefits ratepayers in a variety of ways, which should be accounted for when evaluating portfolios of projects.
- 3) Decisions about who pays for transmission can be simplified by integrating the planning process (i.e., identifying, evaluating, and selecting projects) and the cost allocation process (i.e., deciding how costs should be spread).

The EF³ analysis included five major recommendations, most of which align with FERC’s Order 1920:

EF ³ Recommendation	FERC’s Final Rule
Continue to require 20-year planning horizons that include multiple scenarios and incorporate known factors, such as approved integrated resource plans and enacted laws.	Requires plans to be conducted at least every 5 years that reflect 20-year planning horizons and incorporate at least 3 scenarios. Must consider and include 3 factors that will affect the future resource mix within long-term scenarios and at least consider another 4 factors, recognizing that they may have wider sensitivity ranges.
Require a minimum set of benefits to be considered and require that costs and benefits be considered on a portfolio basis.	Requires at least 7 economic- and reliability-oriented benefits to be considered when evaluating benefits and costs. Encourages, but does not require, consideration of portfolios of projects.
Require clear disclosure of the methodology behind each benefit valuation in a transparent and replicable fashion.	Requires transmission planning regions to include in their Open Access Transmission Tariffs a

	general description of how they will measure each of the 7 required benefits.
Recommend that benefit-cost analyses for project portfolios be conducted at both a regional and subregional level.	Does not address the calculation of costs and benefits at a subregional level but also does not restrict such an approach from being adopted.
Require ex ante cost allocation methodologies to be published in transmission tariffs in advance.	Requires transmission planning regions to file one or more ex ante cost allocation methodologies as long as they ensure that costs are allocated roughly commensurate with benefits.

The best practices that EF³ identified in its analysis—and that are included in FERC’s rule—enable transmission planners to move away from a mode characterized by crisis management and reactive “whack-a-mole” investments and toward an approach that prioritizes a pragmatic, orderly buildout of the grid to meet future needs.

While FERC’s rule seems likely to provide grid managers with tools to meet economic and reliability needs, much more in the way of federal policy and financial support will be needed to enable grid buildout at the pace and scale necessary to address the climate crisis.

According to some analyses, U.S. transmission capacity must increase between two to five times to meet net-zero goals by 2050, which will require at least double the \$25 billion per year currently being spent. The \$4.5 billion that Congress appropriated to the Department of Energy for the Transmission Facilitation Program and Transmission Facility Financing Program is a strong down payment, but much more investment will be needed, principally from the private sector.

Transmission projects often take 10 or more years to build. Given that reducing greenhouse gas emissions today is more impactful than reducing them in a decade, that pace will need to accelerate if we are to meet emissions reduction goals at an appropriate timescale. Accelerating the pace will require a variety of reforms, including how we site and permit clean energy infrastructure, federal authorities to compel transmission buildout, and many more.

Long timelines for building new transmission capacity also mean that utilities must look for complementary investments in grid upgrades to meet unprecedented load growth in the near term. As discussed at an EFI Foundation [workshop on load growth](#) highlighted, utilities expect that much of that near-term load growth will be served by new gas-fired capacity. The FERC rule requires grid planners to consider grid-enhancing technologies within their long-range transmission plans. However, more work will be needed in terms of incentives and regulatory frameworks to ensure that a full suite of resources is properly considered.

Finally, sources of clean firm capacity are not coming online fast enough to replace the retirements of fossil-based resources like coal. Part of the issue is technology readiness, but another part is how grid planners assess potential resources. Enabling resources like advanced nuclear, enhanced geothermal, and long-duration storage will likely require rethinking bulk power market structures and how resources are valued and deployed.

Once implemented, FERC’s transmission planning and cost allocation rule will serve as one major piece of the puzzle to ensure the U.S. grid is tailored to meet 21st-century needs. The EFI Foundation looks forward to informing the many other policies needed to modernize the U.S. electricity grid for resilience, load growth, the clean energy transition, and energy security and thereby unlock much greater private investment in a 21st century grid.