Pursuant to the Federal Energy Regulatory Commission’s (FERC or Commission) March 2, 2022 Notice Inviting Post-Meeting Comments, Americans for a Clean Energy Grid (ACEG) submits these Comments to address the issues discussed during the February 16, 2022 meeting of the Joint Federal-State Task Force on Electric Transmission (February 16 Task Force Meeting) and identified in the Agenda issued on February 2, 2022.

I. INTRODUCTION AND SUMMARY

ACEG appreciates the opportunity to provide comments on the topics addressed at the February 16, 2022 Task Force Meeting. **Topic I**, regarding specific categories of benefits that transmission providers should consider for purposes of cost allocation, presents a key opportunity for the Commission to provide national guidance on the set of benefits to be evaluated with standardized terminology and definitions. By providing a consistent way for transmission planners to assess benefits, the Commission can ensure that consumers access the least cost power (generation plus transmission), necessary for rates to be just and

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1 ACEG represents a diverse coalition of stakeholders focused on the need to expand, integrate and modernize the high-voltage grid in the United States. The ACEG coalition includes utilities that develop, own, and operate transmission, trade groups that include transmission owners and transmission equipment manufacturers among their members, renewable energy trade groups and advocates, environmental advocacy organizations, buyers of energy, labor unions, and energy policy experts. ACEG seeks to educate the public, opinion leaders, and public officials about the needs and potential of the transmission grid. These comments do not necessarily reflect the views of individual members.
reasonable. If benefits are ignored, then transmission will be under-planned and under-sized, causing overall rates to be higher than they need to be.

Transmission benefits should be broadly defined and go beyond the siloed categories of reliability, economics and public policy that are used today. Resilience, generation diversity and resource adequacy benefits must be included in the definition of benefits to ensure appropriate cost allocation methodologies are developed. The benefits of interregional coordination, including capacity sharing in times of need, are widely accepted.\(^2\)

Strengthening the transmission grid and increasing interregional ties are essential to prevent power outages by cancelling out local fluctuations in the weather that affect electricity demand. This is primarily due to fluctuations in heating/cooling needs and electricity supply, including changes in wind and solar output as well as failure of conventional power plants due to extreme weather. Many severe weather events migrate from region to region, allowing one region to import electricity during its time of need and then export to other regions once the storm moves on. Grid operators have confirmed that connecting large geographic areas via transmission saves consumers billions of dollars per year, during severe weather and otherwise, by reducing the need for power plant capacity by reducing variability in electricity demand.

\(^2\) The essential role of large-scale transmission for reliability was emphasized by multiple panelists at the Reliability Technical Conference. Jim Robb, NERC President and CEO, pointed out that “transmission infrastructure will be required to support reliability as the grid continues to transform. This includes infrastructure to support resilience, and to deliver renewable resources from remote areas to load centers.” Transcript of the Annual Commissioner-Led Technical Conference on Reliability, Docket No. AD21-11-000 (Sept. 30, 2021) at 19. Former FERC Commissioner Cheryl LaFleur stated that transmission “helps keep the lights on.” Id. at 90. Debra Lew of the Energy Systems Integration Group recommended that it is “in our best interest as a country to take advantage of our huge geographic diversity to smooth the variability with increased large-scale transmission that connects this diversity.” Id. at 263. Mark Ahlstrom from NextEra expressed support for a national macro grid, stating that it is “the best answer to resilience you can find” and “has all kinds of economic benefits as well.” Id. at 280.
supply and demand. The Commission has an obligation to ensure electricity rates are just and reasonable. To meet this obligation, the Commission should, among other things, require minimum levels of interregional transmission capacity to maximize grid reliability and to ensure that the benefits of interregional capacity sharing are available when needed.

**Topic 2**, regarding cost allocation principles, methodologies and decision processes, requires a certain level of regional variation. However, the Commission’s guidance on defining benefits can form the backbone of any region-specific cost allocation process. Transmission planners should plan first and allocate costs second. Cost allocation that follows benefits is required by the Federal Power Act (FPA). While consensus is very helpful, difficulties in achieving full consensus on cost allocation should not hinder the development of an efficient and reliable regional plan. When planners focus on cost allocation first, benefits tend to be siloed into reliability, economic and public policy categories, and transmission tends to be under-planned and under-built.

Planners should first plan the right system and then work on a fair and efficient allocation of the costs. By accurately and effectively defining the benefits of transmission investments, it will be possible to best determine who should pay for that investment. If transmission projects can be shown to provide broad benefits, then broader cost allocation is supported. Project portfolios can also help with cost allocation because stakeholders tend to

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recognize that when projects are taken together a portfolio will provide some benefits to all areas of a region.

II. COMMENTS

   Topic 1: Discussion of Specific Categories and Types of Transmission Benefits that Transmission Providers Should Consider for the Purposes of Transmission Planning and Cost Allocation.

   To maximize benefits for customers from transmission investment, transmission planners must account for a full range of transmission project benefits. There is a key opportunity for the Commission to provide guidance in the form of identifying the types of benefits and ways to measure them. By providing a consistent way for transmission planners to consider benefits, and a comprehensive list of the types of benefits that should be considered, the Commission can achieve just and reasonable rates.


   At the February 16 Task Force Meeting, Chairman Glick summed up the issue of transmission benefits: “Are [regions] fully assessing all the benefits that are associated with new transmission facilities and allocating the cost accordingly?”4 This is a critically important question because identifying benefits and allocating costs accordingly is a crucial step in finding just and reasonable rates that are a function of both generation and transmission cost, as well as obtaining state support for new transmission construction and siting requests.5


5 “…if a particular state or group of states don’t like how transmission costs are allocated, its going to be much more difficult to site that particular project.” Tr. at 7 (Chairman Glick, FERC).
Reliability, economics, and public policy are the three types of transmission benefits currently considered for purposes of transmission planning. Some panel members suggested that resilience should be added as a fourth category and some suggested that resilience can be included under the reliability category. Either way, resilience is an important benefit and a good example of the type of benefit that is currently under-valued and not sufficiently accounted for in today’s transmission planning.

Some panel members suggest that the traditional categories of benefits should be expanded to include a more comprehensive set of transmission-related benefits. The Commission can either expand the traditional set of benefits or further define the existing categories. The important point is that a more comprehensive list of transmission-related benefits should be identified and standardized on a nationwide basis for application to new transmission development.

6 “The reliability category should be expanded to include resilience for example, grid hardening projects that protect against high impact and high likelihood events.” Tr. at 20 (Commissioner Rechtschaffen, California Public Utilities Commission).

7 “…the three areas can still remain in place, because there’s the flexibility already built in.” Tr. at 38 (Commissioner Clements, FERC).

8 “That's one thing I think the federal government, FERC could really take advantage of if we are talking about looking at reliability inter-regionally, we are talking about, you know, making the grid more interconnected. Having a commonality of our terminology for benefits and what benefits are considered in what categories, I think, would bring a lot of value to just the process and make people, transmission developers and the like, be on the same page and have people have a more transparent understanding.” Tr. at 51-52 (Chair Nelson, Massachusetts Department of Public Utilities). “I think it makes a lot of sense to provide some more commonality.” Tr. at 54 (Chairman Glick, FERC).

9 “You can fit resiliency underneath reliability. You can fit environmental under public policy and potentially under economic. You know, but there may be a place for FERC to make that more clear, to give some direction . . . we know resilience is a needed benefit, and that can fit under reliability, and make sure your modeling reflects that in the future, and your cost-benefit tests reflect that in the future.” Tr. at 38 (Chair French, Kansas Corporation Commission). “…a lot of regions have different names for the same things, and the categories of benefits that different regions use are similar but not exact.” Tr. at 51 (Chair Nelson, Massachusetts Department of Public Utilities).
Indeed, many benefits will fall into more than one of the three traditional categories.\(^\text{10}\) ACEG supports the studies and comments filed in the Commission’s Transmission Planning Advanced Notice of Proposed Rulemaking (ANOPR)\(^\text{11}\) proceeding that have provided a comprehensive list of the types of benefits that should be addressed in transmission planning decisions. For example, there is broad support for a recent Brattle Report on benefits.\(^\text{12}\) The Commission can build on the benefits identified there and in the Brattle-Grid Strategies report that was referenced by many parties in the ANOPR docket.\(^\text{13}\)

Region-specific analysis that uses standardized benefits will allow for region-specific cost allocation methodologies that account for various state and regional valuations of benefits. Transmission project portfolios and de-siloing of planning analyses will help

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\(^\text{10}\) “So the retirement of a significant amount of coal generation and nuclear generation is as much economics, I would argue, as it is state public policy around decarbonization, and how that gets replaced, particularly sort of with, when you look at the levelized cost of replacement options is also as much economics as public policy.” Tr. at 61 (Chair Scripps, Michigan-Public Service Commission).

\(^\text{11}\) Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection, Advance Notice of Proposed Rulemaking, 176 FERC ¶ 61,024 (2021) (“ANOPR”). Notably, at least 174 commenters (including 59 consumer organizations) support requiring planning authorities to conduct proactive transmission planning that is forward looking, accounts for known changes in cost and consumer and state preferences, and relies on probabilistic scenario planning.

\(^\text{12}\) Pfeifenberger, Johannes, FERC ANOPR Reform: The Need for Improved Transmission Planning and Cost Allocation (2021) at 13, available at https://www.brattle.com/wp-content/uploads/2021/11/FERC-ANOPR-Reform-The-Need-for-Improved-Transmission-Planning-and-Cost-Allocation.pdf. Regarding the presentation by J. Pfeifenberger of Brattle, “he has it divided into lots of different sections, lots of different benefits and provides rigorous metrics for measuring these benefits. I think that’s a great start for any discussion on benefits.” Tr. at 48-49 (Chair Thomas, Arkansas Public Service Commission). “…that presentation was rigorous and thorough.” Tr. at 51 (Chair Nelson, Massachusetts Department of Public Utilities). “I would also say it would make some sense just to elaborate further on benefits, and again the Brattle Report that was mentioned is exactly right.” Tr. at 55 (Chairman Glick, FERC).

maximize the transmission benefits that are identified and applied in planning decisions.\textsuperscript{14}

The Commission can be helpful in initiating processes to gather data to better quantify benefits.\textsuperscript{15} Even difficult to quantify benefits should not be ignored.\textsuperscript{16} For example, when considering reliability beyond near-term NERC compliance on an interregional basis, FERC can be helpful in getting the dialog started.\textsuperscript{17}

\textsuperscript{14} “…it’s the idea everybody’s talking about, removing the silos. It’s not so much expanding categories of benefits, but it is making sure that you consider all of the benefits together when you plan these projects.” Tr. 39-40 (Chairman French, Kansas Corporation Commission). “…a less siloed approach probably makes sense . . . expanded set of benefits makes sense as well.” Tr. 42 (Commissioner Phillips, FERC).

\textsuperscript{15} “To the extent we don’t have a full set of data we need now, we could – the Commission could suggest or give guidance or require planners to phase in the use of probabilistic analysis, so that over time we include this information when we have a more robust historical data set.” Tr. at 72 (Commissioner Rechtschaffen, California Public Utilities Commission).

\textsuperscript{16} “We should be striving to quantify any kind of relevant and realistic benefit. But I wouldn’t push aside benefit categories that aren’t easy to quantify. In fact, I think I would double down and try to find sensible ways to quantify those benefits. The categories that come to mind that are difficult to quantify are environment, diversity, resilience, health and safety. But you know as, you know, Dr. Pfeifenberger had indicated, even categories like reliability that seem difficult to quantify, there are sensible ways to kind of quantify those categories.” Tr. at 73 (Commissioner Allen, Vermont Public Utilities Commission).

\textsuperscript{17} “But if you’re looking at something broader than that, I don’t know that we have the tools in the toolbox today to do that, and because it’s inter-regional, it’s something that only FERC can do. It’s not going to happen without, without FERC sort of pushing us in this direction. But I think the benefit of doing that, of coming up with some sort of quantifiable reliability beyond sort of near-term NERC violation that’s tied to transfer capacity, preparedness for extreme weather events, is going to be hugely useful, both between regions and then within RTOs that are often in many cases struggling with some of these same questions.” Tr. at 75 (Chair Scripps, Michigan Public Service Commission). “So how do you balance something that is providing benefits, economic and otherwise, but ultimately why they’re needed are to address the system-wide resilience between regions. If FERC can lead on that, I think not will it solve the problem of inter-regional work, it will also give the RTO and others tools in the toolbox for some of these same things within the regions.” Tr. at 75-76 (Chair Scripps, Michigan Public Service Commission).
B. Interregional Capacity Requirements Can Provide Significant Benefits.

At the February 16 Task Force Meeting, Commissioner Christie raised the issue of whether there should be a mandatory interregional capacity requirement.\textsuperscript{18} The concept received support from the task force members that expressed an opinion.\textsuperscript{19} ACEG agrees that an interregional capacity requirement would be a useful tool to maintain reliability among regional electric systems and it would provide other benefits. This is another opportunity for the Commission to provide guidance.

There is extensive evidence that interregional capacity transfers can prevent power outages during severe weather events, support normal grid operations at lower cost and provide invaluable resilience benefits in all parts of the U.S. In other words, interregional capacity requirements can be an important part of increasing the resilience of the grid.

There is also the benefits of generation diversity that Chairman Glick discussed at the meeting: “The benefits of diversity are so great and so significant that I think they go beyond

\textsuperscript{18} “So I want to hear from the state regulators about that very specific type of project, inter-regional, to ensure a minimal level of power transfer capacity.” Tr. at 44 (Commissioner Christie, FERC).

\textsuperscript{19} “With respect to Commissioner Christie's proposal, I like that idea. I think you should first measure what we have now to come up with a reasonable threshold. But the primary benefit of doing something like that would be to get started. Then you have data from things going back and forth. There were times in our Seams process where there were no transactions. It's hard to project anything when there's no transactions and you don't know what the barrier to the transactions are. So getting started will give you data to have a rigorous process to determine benefits and cost allocations. So I like that proposal, thank you.” Tr. at 45 (Chair Thomas, Arkansas Public Service Commission).

“…we need to do more and better on the inter-regional frame and there’s just tremendous room for opportunity.” Tr. 46 (Commissioner Allen, Vermont Public Utilities Commission). “If you read the Kansas Corporation Commission’s comments in response to the ANOPR, I believe we actually also made that specific proposal, to create a minimum level of interconnectivity between the regions. You know, and I want to say that’s based on experience. . . we experienced winter storm Uri. We empirically knew what that did for us during that event, and I think we had 7,000 megawatts of imports coming in from PJM and MISO that we were able to flow into our region. That literally kept the lights on for most of that time. . . . we know that improving our connectivity with our neighbors will make us more resilient, because we've seen it now in the past.” Tr. at 46-47 (Chair French, Kansas Corporation Commission).
the three or four categories we’ve always been talking about in terms of transmission benefits . . . To have access to different types of generation at different times really provides, I would suspect, enormous benefits.”20

The Commission should establish a minimum interregional capacity requirement to ensure that these benefits are available when needed. The Commission could also be effective in establishing planning rules that enhance transmission coordination and operations across regional seams. If the Commission does not establish a required amount of interregional capacity, it should at least require planning regions to start using a uniform modeling approach with common assumptions, methods and timelines.

1. Interregional Capacity Requirements Can Save Billions of Dollars During Extreme Weather Events and Make the Grid Stronger Every Day.

Resiliency benefits are specific and quantifiable. The recent report, Transmission Makes the Power System Resilient to Extreme Weather, analyzes five recent severe weather events that have occurred across the U.S. in just the past decade. It determines the dollar value that additional transmission ties would have provided:21

- Winter Storm Uri (February 2021) – An additional 1 gigawatt (GW) of transmission ties between ERCOT and the Southeastern U.S. could have saved nearly $1 billion and kept power flowing to hundreds of thousands of Texans. Each 1 GW of transmission ties could have saved an additional $100 million to consumers in the Great Plains (SPP region) and Gulf Coast States (MISO region).

20 Tr. at 57 (Chairman Glick); “I also believe that there is real value in essentially connecting, building greater connections within the region and between regions, and to diverse resources using both bulk transmission, and that diversity benefit is pretty important going forward.” Tr. at 62-63 (Commissioner Allen, Vermont Public Utilities Commission). “I also think it’s very important that we do include the benefits like diversity, like resilience, where quantification is still evolving.” Tr. at 71 (Commissioner Rechtschaffen, California Public Utilities Commission).

• Texas Heatwave (2019) – An additional 1 GW of transmission ties between ERCOT and the Southeastern U.S. could have saved consumers $75 million in higher power prices.

• Polar Vortex (2019) – An additional 1 GW of transmission could have saved Midwest consumers $2.4 million, but this event was more notable for showing how transmission expansion benefits both interconnected regions. Higher wind production in PJM was able to move westward to support the MISO grid during its time of peak demand, a reversal of the typical eastward flow of power.22

• North East Bomb Cyclone (December 2017-January 2018) – New England, New York and Mid-Atlantic regions could have each saved $30-40 million for each GW of stronger transmission ties. Stronger transmission ties between the Mid-Atlantic region and Chicago could have provided an additional $40 million in benefits during this same event.

• North East Polar Vortex (January 2014) – New England, New York and Mid-Atlantic regions could have each saved between $9 to $21 million with stronger transmission ties.

Transmission lines cost approximately $700 million per GW of transfer capacity.23 In the case of the February 2021 Texas outages, the value of power delivered to Texas could have fully covered the cost of new transmission to the Southeast.24 For other lines and severe weather events the value of added transmission ties for just one event could have defrayed a significant portion of the cost of building transmission.

22 Id. at 17.


A stronger transmission grid and robust interregional ties will be valuable every day, not just during extreme weather events.\textsuperscript{25} Transmission ties that are valuable during severe weather events can also deliver the Midwest’s low-cost wind resources to electricity demand centers in the Eastern U.S. Power can flow in both directions on transmission, so consumers at both ends of the transmission line benefit. Recent studies show that interregional transmission ties become increasingly valuable as wind and solar generation increases in different parts of the country.\textsuperscript{26} Transmission lines aggregate diverse sources of electricity supply and demand to balance out localized disruptions during extreme weather and they provide a value by canceling out local fluctuations in wind or solar output. A region can also take advantage of ties between regions to export electricity to avoid renewable generation curtailments as well as manage internal congestion and transmission flows. Interregional transmission ties are the “lifelines” that keep the grid up and running when these types of interruptions occur.\textsuperscript{27}

Today’s regional planning analyses consider an overly narrow set of benefits, with many benefits either not considered or not quantified.\textsuperscript{28} As a result, despite the positive role interregional transmission plays in supporting grid resiliency, annual regionally planned

\textsuperscript{25} Grid Strategies, LLC, \textit{The One-Year Anniversary of Winter Storm Uri, Lessons Learned and the Continued Need for Large-Scale Transmission} (2022) at 1, available at https://gridprogress.files.wordpress.com/2022/02/the-one-year-anniversary-of-winter-storm-uri-lessons-learned-and-the-continued-need-for-large-scale-transmission.pdf.


\textsuperscript{27} General Electric International, Inc., \textit{Potential Customer Benefits of Interregional Transmission} at 8, 20 (Nov. 29, 2021) (concluding that coordinated interregional transmission is a proven enabler for resilient decarbonization.).

\textsuperscript{28} Supra, n. 24 at vi, 4, 20-25.
transmission investment in RTOs and ISOs has decreased steadily over the last decade.\textsuperscript{29} There have been no major interregional transmission projects built in the U.S. during that time.\textsuperscript{30} This trend must be reversed.


Despite the large savings of interregional capacity, transmission planning and cost allocation analyses typically do not account for transmission’s value for making the grid more resilient against severe weather and other unexpected threats. Transmission planning processes usually assume normal electricity supply and demand patterns, and do not account for the value of transmission for increasing resilience or the hedging or insurance value from protecting consumers against the economic and reliability impacts of severe weather events.

There is a growing consensus in the industry that the benefits of a minimum interregional capacity requirement exceed the costs. Some form of a minimum interregional capacity requirement is supported by members of the task force\textsuperscript{31} and by dozens of commenters in the Commission’s Transmission Planning ANOPR in Docket No. RM21-17.\textsuperscript{32} The benefits include delivering renewable resources to load, along with increased reliability, resiliency, market efficiency, and resource adequacy.\textsuperscript{33} In fact, as noted above, there are

\textsuperscript{29} Id. (citing Gramlich and Caspary, Planning for the Future: FERC's Opportunity to Spur More Cost-Effective Transmission Infrastructure at 25 (January 2021)).

\textsuperscript{30} Id. at iii, 3.

\textsuperscript{31} See supra, n. 20.


\textsuperscript{33} Id. at iii.
substantial costs and risks to not expanding interregional transmission planning, especially during extreme weather events.

The Commission should establish pro-transmission policies that account for the many benefits of interregional transmission. “Just as President Eisenhower created the interstate highway system to protect national security and facilitate interregional trade, there is a clear national interest in ensuring that the backbone of the 21st century economy — the power grid — is strong and secure.”34 Among other things, the Commission should require greater regional and interregional coordination in how transmission is planned and funded. The Commission should require minimum levels of interregional transmission to maximize grid reliability and to ensure that these benefits are available when needed. The Commission should also establish planning rules that enhance transmission coordination and operations across regional seams. Even if the Commission does not establish a required amount of interregional capacity, it should at least require planning regions to use a uniform modeling approach that incorporates common assumptions, methods and timelines.

**Topic 2:** Discussion of Cost Allocation Principles, Methodologies, and Decision Processes for the Purpose of Transmission Planning and Cost Allocation.

ACEG recommends that transmission planners plan first, allocate costs second. Most of the concerns raised by parties in the various dockets about new transmission investment relate to cost allocation. This is not surprising because cost allocation that follows benefits is extremely important to achieve efficiency, non-discrimination, and just and reasonable rates. Cost allocation challenges, however, should not hinder the development of an efficient and reliable regional plan. When planners focus on cost allocation first, benefits tend to be siloed

34 Supra, n. 21 at 5.
into reliability, economic and public policy categories. These distinctions are not clear, as discussed above. Thus, allocating costs based on the three traditional silos can lead to inefficient plans.

Planners should first plan the right system and then work on a fair and efficient allocation of the costs. A fair cost allocation regime might provide for load in one state paying more than load in another state. It should not provide for one state paying the full cost and allowing beneficiaries in other states to free ride. By accurately and effectively defining the benefits of transmission investments, it will be possible to best determine who should pay for that investment. If transmission projects can be shown to provide broad benefits, then broader cost allocation is supported.

Transmission project portfolios can also help with cost allocation because stakeholders tend to recognize the fact that when projects are taken together, a portfolio will provide some benefits in all areas of a region. There is an element of simplicity when considering a portfolio of projects.35

ACEG also supports cost allocation flexibility if it enables regions to gain stakeholder support for new transmission expansion. MISO’s recent MVP filing paves the way for MISO to move ahead with Long Range Transmission Plan projects, potentially starting this year, which could result in significant new regional transmission in MISO.36 MISO’s filing also offers a model for how other regions could develop cost allocation agreements to comply with a potential planning rule resulting from the Commission’s ANOPR proceeding. MISO’s

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35 “You’re going to benefit from this one, I’m going to benefit from that one. I think it provides a much more optimal way of figuring out a way to allocate cost.” Tr. at 86 (Chairman Glick, FERC).

The proposed methodology appropriately reflects the broad benefits provided by regional transmission and offers a reasonable path forward for much needed regional development.

III. CONCLUSION

Transmission benefits should be broadly defined and go beyond the siloed categories of reliability, economics and public policy benefits that are used today. Transmission planners must account for a full range of transmission project benefits and use transmission portfolios to account for all benefits. ACEG supports the development of interregional capacity requirements to maintain electric system reliability during extreme weather and other everyday risks and challenges. The Commission should establish minimum interregional capacity requirements to ensure that reliability and resiliency benefits will be available in the future.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon all of the parties listed on the official service list for the above-referenced proceeding, in accordance with the requirements of Rule 2010 of the Commission’s Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, D.C. this 1st day of April 2022.

/s/ Leah Kaiser
Leah Kaiser
HUSCH BLACKWELL LLP