

Additional Questions for the Record

The Honorable Bob Latta (R-OH)

1. Southern Company covers several southeastern states and borders both vertically integrated utilities and RTO's. Your system has seams and bilateral agreements with your neighbors to buy and sell power when appropriate. What does Southern consider when examining investments into interregional transfers?

Interregional transfer investments must meet both economic and reliability objectives. We evaluate interregional transmission on the same total-cost basis as all other options, considering capital costs, energy and capacity benefits, ongoing maintenance, integration costs, network upgrades, and additional operating requirements such as contingency mitigation, voltage support, inertia, and fault current needs. Interregional transmission is pursued only if this full evaluation identifies it as the least-cost, most reliable solution compared to other options. To date, we have not yet identified an interregional project that is economic for our customers, but we will continue to evaluate those projects in the future to ensure the value proposition has not materially changed. We are interested in exploring interregional transmission policies and solutions that fully account for the total cost to our customers.

Additionally, Southern Company's electric operating companies (Operating Companies) regularly engage with our neighbors through the Southeastern Regional Transmission Planning (SERTP) planning processes as well as through semiannual coordination meetings with first-tier interface utilities and via ad-hoc joint studies. These frequent touch points provide Southern Company and our neighbors with ample opportunity to exchange data and evaluate potential interregional transfer investments that may be more efficient or cost effective than alternative solutions.

2. Some stakeholders who advocate for big transmission build out to connect intermittent energy sources say they are cheaper, typically citing Levelized Cost of Electricity, or LCOE, rather than the full cost of delivered power. Does this view fully account for the costs associated with weather dependent resource generation?

No, a LCOE-only comparison does not fully capture the cost of delivered power.

LCOE measures the cost per MWh produced by a resource, but it generally excludes several system-level costs and value considerations, including:

- **Reliability contribution (ELCC):** *It does not reflect how much dependable capacity a resource provides during periods of greatest system need, that is, its value as a capacity resource*
- **Integration costs:** *Additional reserves, balancing services, ramping requirements, curtailment, storage, and flexible generation needed to manage weather-driven variability are not included.*
- **Transmission and delivery costs:** *Large transmission expansions, congestion, and losses associated with moving energy from resource-rich locations to load centers is outside the scope of LCOE.*

- ***Time and location value:*** *A MWh produced when and where the system needs it most is more valuable than a MWh produced during low-value periods, but LCOE treats all MWh equally.*

As a result, citing LCOE alone is not a useful metric for planning and significantly understates the full cost of serving customers and can make intermittent resources appear less expensive than they are, once reliability, integration, and transmission requirements are considered.

The Honorable Brett Guthrie (R-KY)

1. We've seen in testimony and heard during this hearing that massive regional and interregional transmission, at least on paper, are supposed to deliver huge affordability and reliability benefits to the electric system, and consumers
 - a. Do you consider this kind of transmission in your planning and, if so, why is it either getting built or not getting built?

Yes, our Operating Companies evaluate regional and interregional transmission solutions through our internal integrated resource planning processes, through our regional planning process, the SERTP, and through direct coordination with both neighboring and interregional utilities.

Interregional projects advance when they demonstrate a full business case benefit for customers, weighing capacity value (firm, deliverable megawatts) and energy value (dispatch savings) against the full cost of delivery, including network upgrades, interconnection costs, and the reactive power and voltage support needed for grid stability. Measured against regional alternatives such as transmission, generation, and demand side solutions, interregional projects have historically not been selected because they have not demonstrated sufficient reliability or economic benefit on this basis. This robust business case process ensures we are providing customers with the least cost, most reliable solution.

The 2025 NERC Long-Term Reliability Assessment reinforces the importance of this customer-focused evaluation, noting elevated reliability risks in the regions surrounding Southern Company and the SERTP footprint.

Southern Company's resource solicitation process allows resources from outside the region to participate. To date, however, those solicitations have not produced meaningful participation from external resources.

The Honorable Mariannette Miller-Meeks (R-IA)

1. One of the things your testimony highlights is the value of integrated planning. Southern Company serves customers across three states, three separate service territories, each with their own state commission. And yet your planners sit at the same table, working from the same inputs and assumptions across all three of those service territories. Has that approach, planning across service territories rather than within each one in isolation, produced more cost effective outcomes for your customers?

Yes, our integrated planning process has delivered more cost-effective outcomes for customers while maintaining industry leading reliability performance.

Through our vertically integrated, state-regulated processes, our planners can sit at the “same table” and optimize generation, transmission, and fuel procurement decisions to deliver the best value for customers across our system.

This integrated approach works because generation, transmission, and fuel procurement are planned across the system in unison. Transmission cannot be planned in a vacuum; it must be synchronized with generation and load to help ensure the least-cost, most reliable solution for customers over the long term.

A significant benefit of coordinated Southern Company system planning and operations is that load diversity across the three-state service territories allows each Operating Company to maintain lower reserve levels than would otherwise be required individually. Coordinated planning also enables the temporary sharing of capacity surpluses and deficits. For example, one Operating Company may rely on another’s surplus capacity and defer new capacity investments, helping support customer affordability.

Our holistic planning process is designed to support rate stability for our customers. For example, Georgia Power recently committed to approximately \$1.6 billion in projected customer savings, and Alabama Power and Georgia Power implemented multi-year retail rate freezes. At the same time, our retail rates remain more than 10% below the national average, while maintaining industry leading reliability and undergoing one of the largest infrastructure expansions in company history.

The Honorable August Pfluger (R-TX)

1. Democrats like to point to wind and solar generation costs during the sunniest and windiest days to say that renewables should dominate our resource mix. But this fails to recognize the role of dispatchable resources when vulnerable communities need it most. Southern Company has all types of resources – nuclear, gas, coal, wind, solar, and batteries. When you were planning to maintain the system during Winter Storm Fern, what resources did you rely on?

We establish reliability criteria through an exhaustive process to ensure we have resource adequacy. One of the primary measures of resource adequacy is the target reserve margin, which is the amount of additional capacity above our forecasted peak demand, and provides insurance for when the system is challenged such as during an extreme winter event or the loss of a generating unit. The Southern Company system plans to seasonal reserve margin targets of 26% in the winter and 20% in the summer.

Our target reserve margin studies evaluate 50 historical weather years, random selections of generating unit forced outages using historical unit performance, multiple load forecast errors and more assumptions for a total of over half a million simulations per target reserve margin study. This reliability criteria is necessary to assess the system’s capacity and energy requirements; that is, how much capacity and energy we need to serve our customers, and whether that energy will be there when we need it. This assessment also accounts for the firm reliable capacity contribution of all resource types, including nuclear, natural gas, coal, oil, hydro, solar, wind, and battery energy storage systems. We also

plan for firm natural gas transportation to help ensure fuel availability for generation resources during periods of peak demand and extreme weather conditions.

Southern Company's comprehensive resource adequacy analyses are designed to prepare the system for peak winter conditions by relying on a diverse resource mix and assigning each resource credit based on its firm, reliable capacity contribution. That approach was validated during Winter Storm Fern, when the system performed strongly under challenging conditions. Throughout the event, we relied primarily on firm, dispatchable generation to help ensure power was available when customers needed it most. Renewable resources contributed to the successful operation of the system, but our planning processes only credited those resources for output that could reasonably be expected during the event, such as excluding solar generation during the early morning hours. By appropriately crediting each resource for its dependable contribution and drawing on the full range of available resources, we maintained reliability throughout the storm.

2. Is it correct that, during some of these major storms, there is sometimes not enough energy to transfer from other regions? Transmission capacity is not the problem. The problem is that there's not enough dispatchable generation. Should this be fixed by federal mandates or by states and local planners?

Yes, Southern Company's experience is that during extreme weather events, our system has not been transmission constrained. We could build significant additional interregional transmission, but without available generation on the other end of the line, those wires cannot deliver power that is not being produced.

Typically, the Southern Company system is able to serve our customers with our own resources during peak events, which is due primarily to our state regulatory commissions' sound commitment to resource adequacy. We have imported additional, available power (as needed) during recent peak events, though our experience has been that transmission is not the limiting factor; instead, there has simply not been significant power available to import from our neighbors, primarily due to the resource adequacy, or generation shortfall many surrounding regions are experiencing.

Insufficient dispatchable generation should be addressed by states and local planners who hold utilities to firm capacity obligations, not federal mandates. Mandating uneconomic interregional transmission in the Southeast would not create generation that does not exist.