## Chairman Manchin's Opening Statement During a Full Committee Hearing to Examine the Opportunities, Risks and Challenges Associated with Growth in Demand for Electric Power in the United States

- The Committee will come to order.
- Today we are here to discuss the opportunities, risks, and challenges associated with growth in demand for electric power in the United States.
- In the half-century after World War II, demand for electricity grew steadily in this this country along with our economy.
- But in the decade following the implementation of the North American Free Trade Agreement—or NAFTA—in the 1990s, annual electricity demand growth fell by nearly 45 percent.
- And for the past two decades, electrical demand—or "load"—has been flat across the country.
- We're here today because that era appears to be coming to an end, with exponential growth in the domestic technology and manufacturing sectors.
- Utilities and grid experts across the country are telling us that electricity demand is poised for truly remarkable growth.

- Meeting this demand growth may prove to be one of the greatest challenges—and also opportunities—of the 21<sup>st</sup> century for our citizens, our economy, and the defense and security of our country.
- I want to thank our witnesses for being here to share their perspectives on this historic load growth and what is at stake if we do or do not meet it.
- The load growth is being driven by 3 main factors.
- First, it is the reshoring of industry and advanced manufacturing spurred by the Bipartisan Infrastructure Law, the CHIPS Act, and the IRA.
  - Construction spending on manufacturing has more than doubled since we signed these bills into law, as shown in the chart behind me.
  - We are seeing new factories to build advanced energy and semiconductor technologies spring up practically every week.
- Second, it is the revolution in advanced computing applications, especially artificial intelligence, and the rapid growth in data centers to provide the processing power needed for those technologies.

- And third, it is the push to electrify technologies across multiple sectors, like the Administration's push to flood the market with EVs.
- The North American Electric Reliability Corporation or NERC projects in its 2023 Long-Term Reliability Assessment that there will be 90 gigawatts of demand growth by 2030. That's over 10% of peak U.S. electrical demand!
- But even that number is likely conservative. NERC relies on data submitted in the previous year from industry, and the forecasts just keep going up.
- Last month, the Texas grid operator revised its 2030 load forecast from last year to add 40 gigawatts of new expected load growth.
- That's like adding the demand of the entire state of California to the Texas grid—six years from now!
- This should be a wake-up call—we need to be prepared to meet the demand.
- Let me be clear: this load growth is the opportunity of a generation and it's ours to lose.
- The reason we have this growth is that industries which will define the 21<sup>st</sup> century—chips, AI, advanced manufacturing—are tripping over one another to build in America.

- But there is no guarantee of success.
- To put it plainly, we can't be open for business if we can't keep the lights on.
- If America can't build the energy infrastructure needed to support these industries with reliable and affordable power, we will be forfeiting the opportunity to be on the forefront of the technologies of the future and cede control to China and other nations that we cannot necessarily trust.
- And right now, between the Administration's policies and our inability to act in Congress, it seems like we may be in real danger of doing just that.
- We've heard from both FERC and NERC that our grid's reliability and affordability are at risk because we are retiring baseload and dispatchable generation faster than we can replace it.
- NERC's summer assessment came out last week, and shows half the country at elevated risk of blackouts this summer, as shown in the chart behind me.
- Last July, NERC even added "Energy Policy" as a brand new category of major risks facing our grid—it's ridiculous that government action is creating new categories of grid risks, instead of preventing risks.
- As if to prove NERC's point, EPA recently finalized four new power plant rules that, as far as I can tell, aim to kill

coal completely and stop natural gas from replacing it, even though these dispatchable resources are essential for reliability.

- If this Administration were serious about onshoring critical industries—the ones driving the load growth—they wouldn't be in a race to take power offline, they'd be racing to bring new generation online.
- But instead, it's getting harder and harder to permit and build new energy infrastructure and connect new generation to the grid.
- We now have 2.6 million megawatts of generation waiting an average of 5 years to connect.
- For example, in West Virginia, we have an over-1,800 megawatt, state-of-the-art combined-cycle gas plant with carbon capture proposed, but the company's telling me they have to wait half a decade before they get the green light to even start the permitting process!
- And to be clear, these are not just problems for fossil plants. It's as bad or worse for wind.
- American Clean Power just published their 2024 first quarter figures on newly installed renewables, and we're on pace to install less wind in 2024 than we did during the worst year of the Great Recession, as shown in the chart behind me.

- Note that solar, which is not nearly as reliant on permitting and transmission, is not experiencing the same bottlenecks, but it could if we don't fix our permitting problems.
- For American families, for our economy, and for national security, we have to make it easier to build generation, pipelines, and transmission lines to meet this moment.
- FERC finalized two rules last week which, in time, may help build new transmission, but let me be clear—these rules are using the tools FERC currently has and are not a replacement for Congressional action.
- These rules help with one aspect of one part of a bigger set of grid permitting problems, but, as my friend Senator Hickenlooper said, they're "a band-aid on Congress's inaction."
- For example, the new rules took action on transmission lines within regions, not for the inter-regional lines that truly have the most reliability and affordability benefits to offer—and only if the rules prove durable in courts and under future Administrations.
- I want to quote FERC Commissioner Clements two days after the rules came out. She said:

"Considerable work remains to be done, both at the commission and in Congress, if we are to realize the modern electricity grid on which the continued vitality of the United States' economy and security

increasingly depends... For some of these next steps, particularly inter-regional planning and permitting reform, Congressional action could be critical in providing direction and momentum to the commission."

- And just so we're clear that permitting and transmission legislation is not a partisan priority, let me also quote Mario Layola, a Senior Fellow at the Heritage Foundation who served in the White House during the Trump Administration.
- He said, after FERC issued its new rules:

"Transmission expansion has only become more difficult. These are problems only Congress can solve."

- I have to say, I couldn't agree more.
- There are critical permitting problems for all types of energy infrastructure that only Congress can fix, and I remain committed to addressing that.
- In fact, each of the industry witnesses before us today submitted testimony that speaks in stark terms to the permitting challenges facing new sources of electric supply and demand. I look forward to hearing more from our witnesses on this topic shortly.

• With that, I will turn it over to Ranking Member Barrasso for his opening remarks.

## Witness introductions and statements

- Thank you, Senator Barrasso.
- I'd like to turn to our panel of witnesses.
  - Mr. Ben Fowke, Interim CEO and President of the American Electric Power Company (one of our home state utilities in West Virginia);
  - Ms. Karen Onaran, President and CEO of the Electricity Consumers Resource Council;
  - Mr. Scott Gatzemeier, Corporate Vice President of Front End U.S. Expansion at Micron Technology; and
  - Mr. Mark Mills, Executive Director at the National Center for Energy Analytics.
- Before we proceed to opening remarks, I would like to turn to my friend Sen. Risch to introduce Mr. Gatzemeier.
- Now to witness opening remarks.
  - o Mr. Fowke, we'll begin with you.

- o Thank you. Next, we'll hear from Ms. Onaran.
- o Thank you. Finally, we'll hear from Mr. Gatzemeier.
- o Thank you. Now, we'll hear from Mr. Mills.
- Thank you all again for being here with us and for your testimony. We will now begin with questions.