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NOMINATION OF JOHN L. RYDER OF TENNESSEE TO BE A MEMBER OF THE
BOARD OF DIRECTORS OF THE TENNESSEE VALLEY AUTHORITY

Tuesday, March 20, 2018

United States Senate

Committee on Environment and Public Works

Subcommittee on Clean Air and Nuclear Safety

Washington, D.C.

The committee met, pursuant to notice, at 10:07 a.m. in room 406, Dirksen Senate Office Building, the Honorable Shelley Moore Capito [chairwoman of the subcommittee] presiding.

Present: Senators Capito, Whitehouse, Boozman, Wicker, Fischer, Ernst, and Gillibrand.

Also Present: Senator Carper.

Senator Capito. I want to thank everyone for being here today. This hearing is of the Clean Air and Nuclear Safety Subcommittee and it is now called to order.

I am going to reverse the order of my written statement out of deference to the fact that a very distinguished Senator from Tennessee is here with us to make an introduction.

So, Senator Alexander, I recognize you for the purpose of making an introduction. Thank you.

STATEMENT OF THE HONORABLE LAMAR ALEXANDER, A UNITED STATES
SENATOR FROM THE STATE OF TENNESSEE

Senator Alexander. Thank you, Madam Chairman, Ranking Member Whitehouse, Senator Ernst. It is a privilege to be here and thank you for your courtesy.

I am here today to introduce John Ryder, of Memphis, who has been nominated to serve as a member of the Board of the Tennessee Valley Authority.

John Ryder is a good man and the TVA is on a good path. Its leadership over the last few years have made sound decisions that will benefit ratepayers and our region; it will keep electric rates at a reasonable cost; it will keep our air clean; and will keep industry coming to the Valley. John Ryder is a great choice to continue on that path.

TVA's mission is to provide safe, clean, reliable, and affordable power for the region's homes and businesses. To do that, it is placing pollution control equipment on all of its coal plants by 2020, building new natural gas plants, and opening the first nuclear power reactor in the 21st century.

It also opened the last nuclear power reactor of the last century, so we have a great benefit in our region because of that.

TVA has done this while reducing its debt and reducing

electric rates, which is good news for jobs and economic development in the Tennessee Valley.

As a west Tennessean, John understands how important it is for TVA to continue to provide cheap, clean, reliable electricity for homes and businesses in the seven States that comprise the TVA region.

John has a broad background in public affairs. He has significant litigation experience and has earned numerous awards as an attorney. He has been recognized by Business Tennessee Magazine as being among the 101 best lawyers in Tennessee and has been listed in Best Lawyers since 1987.

I am convinced he will make an excellent TVA Board member. I strongly support his nomination. I encourage the members of the Committee to support his nomination, as well, so his nomination can quickly be considered by the full Senate.

Thank you.

[The prepared statement of Senator Alexander follows:]

Senator Capito. Thank you, Senator.

Now I will recognize our other Senator, distinguished
Senator from the State of Tennessee, Senator Corker.

STATEMENT OF THE HONORABLE BOB CORKER, A UNITED STATES SENATOR
FROM THE STATE OF TENNESSEE

Senator Corker. Junior Senator. Thank you.

Senator Capito. Junior Senator.

Senator Corker. Chairman Capito and Senator Whitehouse, Senator Ernst, thank you for letting me be here. It is a pleasure to be here with Lamar and with our outstanding nominee. John Ryder has been nominated to serve, as you know, on the Board of the Tennessee Valley Authority, and I would like to extend a warm welcome to him and his wife, Lane, and those here supporting his nomination.

With over 9 million customers, TVA is the largest public power utility in the Nation, and it is critical for the region that it remain a low-cost, reliable producer of electricity not only for ratepayers, but also for our State's business recruitment efforts. To continue serving the region, TVA needs a full, well-qualified Board, and I was proud to support the previous four nominees put forward by the President and thank this Committee for swift action on those individuals.

John Ryder has been nominated to fill the current vacancy on the Board. With wide-ranging legal background, John's experience as an attorney will be of great value to the TVA Board.

After graduating from Vanderbilt Law School, John began his career working in Shelby County, and since that time he has developed an extensive practice covering election and commercial law. His law practice has been consistently recognized, as Lamar said, as one of the most respected in the Volunteer State and throughout the Country. As a lifelong Memphian, John understands the important role that TVA plays in our communities and the demands of a growing Tennessee Valley.

In addition to his distinguished career, John has demonstrated a true commitment to the Memphis community; served on numerous boards, including the Opera of Memphis, the YMCA of Greater Memphis, as well as volunteering his time to many other organizations.

Lamar and I both have known John for many, many years, and I wholeheartedly support his nomination. I am confident his diverse background will give him the necessary qualifications to serve TVA's important mission.

So, thank you. Thank you for letting us be here, and I hope that you will support his nomination and confirmation. Thank you so much.

[The prepared statement of Senator Corker follows:]

STATEMENT OF THE HONORABLE SHELLEY MOORE CAPITO, A UNITED STATES
SENATOR FROM THE STATE OF WEST VIRGINIA

Senator Capito. Thank you. Thank you both.

John, if you want to move forward and take a seat, I will get us back on our regular track here. I am going to recognize myself for a brief opening statement, and then the Ranking Member, Senator Whitehouse, for his opening statement.

Senator Capito. As we have heard both distinguished Senators from Tennessee talk about the TVA, we know the broad jurisdiction, both geographically and in terms of the responsibilities. It is important to remember 9 million people are served by the TVA across the seven States, providing affordable electricity, flood prevention, navigation access, and economic development.

Before the TVA, much of the region suffered from a chronic lack of economic development resulting from insufficient energy resources and the constant flooding of the Tennessee River Watershed. The transformation of the region into a growing population and a growing economic base is in large part thanks to the TVA's policies.

Today, however, the TVA is under pressure. Its aging coal and nuclear units require upgrades to extend their service lines and, as with private sector coal and nuclear units, they face

regulatory pressures and price competitions from cheap natural gas. TVA's fuel mix and ability to provide reliable baseload power is essential in fulfilling its mission of providing its customers with affordable electricity at essentially production costs.

The TVA's growing variable renewable resources, led by its traditional hydropower, also pose challenges for TVA's rate modeling. Dams and levees dating back several decades, representative of our Nation's broader infrastructure challenges, will need rehabilitation or outright replacement. Balancing funding those priorities with keeping rates low will pose a special challenge to our nominee, but it is one that historically TVA has been successful in meeting.

As I mentioned in our last TVA nomination hearing, like government entities at the local, State, and Federal level, the Authority is under serious pressure to meet its pension obligations. The GAO has noted that the TVA retirement system is underfunded by about \$6 billion. The \$7.1 billion currently available is only sufficient to cover 54 percent of its expected obligations.

While the TVA's debt has been stable, unfunded pension obligations have increased over the past decade. I am encouraged that the TVA is in the process of transitioning to a 401(k) defined contribution system, and this Committee will

continue to monitor TVA's fiscal health as it balances all of these investment challenges.

If confirmed, Mr. Ryder will serve as TVA's Board of Directors for five years. I believe his accomplished background in business law will be a strong compliment to the Board. I look forward to hearing how you plan to help steering the Board to keep TVA a viable engine for economic development and flood control through its second century of experience.

Not being influenced personally where I live, in my general geographic area, by the TVA, I have come to gain great respect for the vision that was put forward in creating the TVA and the importance that it has to many not just citizens, but government entities throughout the States. We have had the privilege to have some of the already confirmed members before our Committee and I can tell you, Mr. Ryder, when you are confirmed, as my great hope is, you will be joining a very dedicated Board of citizens.

So, I will recognize the Ranking Member, Senator Whitehouse, for an opening statement.

[The prepared statement of Senator Capito follows:]

STATEMENT OF THE HONORABLE SHELDON WHITEHOUSE, A UNITED STATES
SENATOR FROM THE STATE OF RHODE ISLAND

Senator Whitehouse. Thank you very much, Chairman.

I welcome our nominee here today and I want to thank our Tennessee colleagues for appearing on his behalf. They are extremely well regarded in the Senate and their voices in favor of your nomination carry great weight, Mr. Ryder.

As the Nation's largest public utility, the TVA is uniquely positioned to lead the development of clean, reliable, American energy. Three years ago, TVA completed a long-term planning process to identify future energy needs. Its plan would add between 150 and 800 megawatts of large-scale solar by 2023, for instance, and between 3,150 and 3,800 megawatts of large-scale solar by 2033. These renewable goals are in line with recent developments across the energy sector.

In 2017, renewables provided nearly 20 percent of electricity generation in the United States. As wind and solar costs fall, utilities across the Country, even in very red States, have invested heavily in both. The renewable energy industry has hit 3.3 million jobs, more than all fossil fuel jobs combined. The five States that get the largest percentage of their electricity from wind are Iowa, Kansas, South Dakota, Oklahoma, and North Dakota.

In Texas, wind generation hit a record 15 gigawatts in December of 2016, at one point meeting 45 percent of the State's power needs. Eighteen thousand megawatts has been installed and another 5,000 megawatts is under construction in Texas.

In Iowa, Mid-American Energy is planning to add 2,000 megawatts of new wind by 2019, on top of Iowa's already nation-leading investment in wind energy. Once that is all installed, 85 percent of the energy Mid-American generates will be renewable.

Corporate America is going in on renewables. AT&T recently signed two agreements with NextEra Energy for wind power, one for 220 megawatts from an Oklahoma wind farm and the other for 300 megawatts from a Texas wind farm.

I wish Rhode Island had more land so we could get more of these windfarm projects. We have to build it offshore, which is a bit more complicated. That is one of the largest corporate renewable energy purchases in history.

So here is my worry, Mr. Ryder. I will be perfectly candid with you. Notwithstanding the nationwide success of renewables, this Administration seems, with unerring solicitude, to look only at the welfare of the fossil fuel industry.

Our politics have been powerfully influenced by the fossil fuel industry. One means of that industry influence since the Citizens United decision has been unlimited spending and threats

of spending by fossil fuel industry forces.

As general counsel at the Republican National Committee, I suspect you were, in various ways, intimately involved with that operation. Additionally, your background is a little unusual for someone nominated to be a director of an electric utility like the TVA, so I want to assure that you will be undertaking your duties at the TVA with no preconceptions and not, not as an agent for fossil fuel industry influence within TVA.

I look forward to your convincing me that, if confirmed, you will be fair and act in the best interest of TVA ratepayers, including providing attention to environmental consequences and giving wind, solar, storage, distributed generation, and other technologies a fair shake against fossil fuel.

I look forward to hearing your perspective on TVA's long-term plan and whether you will undertake to undo the ambitious renewable energy goals that the TVA set in 2015.

Thank you, Chairman.

[The prepared statement of Senator Whitehouse follows:]

Senator Capito. Thank you, Senator.

And thank you, Mr. Ryder. I want to recognize you for five minutes for your opening statement and recognition of any family or friends that you may have with you, and I want to remind you that your full written testimony will be a part of the record.

Through this hearing and via questions for the record, our Committee members will have an opportunity to learn more about your commitment to public service and our great Nation. I would ask that throughout this hearing you would please respond to the questions today and those for the record in a direct and timely fashion.

So, I have to ask the following questions we ask of all nominees on behalf of the Committee.

Do you agree, if confirmed, to appear before this Committee or designated members of this Committee, and other appropriate committees of the Congress, and provide information subject to appropriate and necessary security protection with respect to your responsibilities?

Mr. Ryder. Absolutely.

Senator Capito. Do you agree to ensure that testimony, briefings, documents, and electronic and other forms of information are provided to this Committee and its staff, and other appropriate committees of jurisdiction, in a timely

manner?

Mr. Ryder. Yes.

Senator Capito. Do you know of any matters which you may or may not have disclosed that might place you in any kind of conflict of interest if you are confirmed?

Mr. Ryder. I do not.

Senator Capito. All right. Mr. Ryder, we look forward to your statement.

STATEMENT OF JOHN L. RYDER, NOMINEE TO BE A MEMBER OF THE BOARD
OF THE TENNESSEE VALLEY AUTHORITY

Mr. Ryder. Thank you, Chairman Capito, Ranking Member Whitehouse, members of the Committee. I am John Ryder. With me today is my wife of 45 years, Lane. We wish our younger daughter could have been here. Nancy Kate Ryder worked on the staff of the Committee of Environment and Public Works from 2005 to 2007. However, happily, she is on her way to Memphis for a visit, bringing with her our grandson, who is a little over two.

I am honored to have been nominated by President Trump to serve as a member of the Board of Directors of the Tennessee Valley Authority, and I am especially honored to have been recommended to the President by my two State Senators, Lamar Alexander and Bob Corker. I thank them for their very kind remarks, and I can assure Senator Whitehouse that they are well regarded in Tennessee, as well as in this body.

My office in Memphis is situated at the intersection of Union Avenue and November the 6th, 1934 Street, which is a curious name for a street. November the 6th Street is named after the date on which the people of Memphis voted for a bond issue that enabled them to buy the utility and create the public utility, Memphis Light, Gas and Water, which today is TVA's largest customer, serving 10 percent of the total population served by TVA and accounting for 12 percent of its load.

For many years I have been involved in civic, political, and community affairs, and have a keen appreciation of Memphis community and West Tennessee and its needs and interests. I have also traveled throughout the region and understand that, as a Board member, I would be representing the interests of the 9 million people in seven States, covering 80,000 square miles, who are served by TVA.

While Memphis Light, Gas and Water is TVA's largest customer, there are over 150 other municipal providers served by TVA, in an industry which, as Chairman Capito has noted, faces major challenges; declining demand for electricity, environmental concerns, the growing difficulty of finding the right mix of generation and fuel.

I am keenly aware of the role played by TVA in economic development through its support of local development efforts. There are increasing economic opportunities for the region and a real chance to make a difference by bringing good paying jobs to a part of the Country that needs good paying jobs.

TVA has a strong responsibility for environmental stewardship. Both as a custodian of public lands and as a major industry in its own right, it has an obligation to protect the natural environment for the benefit of future generations.

TVA has an obligation to maintain the recreational use of TVA lands and lakes. I have had the opportunity, over my life,

to swim, boat, hunt on TVA lands, and I hope that my grandson will have that same opportunity.

Practicing law for over 40 years, I have represented corporations large and small, and appreciate that the appropriate role of a Board member is setting the strategic direction for the corporation, while allowing the officers to run the organization on a daily basis. My understanding of these differing roles was reinforced by my service with various not-for-profit organizations. Some were as small as the Board of Opera Memphis; some as large as the Republican National Committee or the Republican National Lawyers Association.

Those experiences also inform my understanding of the need to separate the political from the governmental. I fully appreciate that the role of a member of the Board of TVA is outside of politics. At the same time, my political experience has given me greater appreciation for the wants, needs, and aspirations of those served by TVA.

My law practice has largely been in the area of bankruptcy, workouts, and restructuring. This has given me experience in evaluating businesses and their viability. I don't think anyone doubts the viability of TVA, but it is always a useful exercise to examine closely the value of the different activities and services of any organization. Where changes are needed, changes should be made.

I will be ready to take a look at the operations of TVA and participate in the discussions over its present condition and future direction.

If confirmed, it will be a great honor for me to be able to serve my community, my region, and our Country in this position.

I thank the Senators for their consideration.

[The prepared statement of Mr. Ryder follows:]

Senator Capito. Thank you.

I will begin the questioning. Thank you, Mr. Ryder, for your opening statement.

You mentioned in your testimony the challenges I think I mentioned in my opening statement as well, that TVA's generation assets are in a changing energy and environmental regulatory climate. Can you speak a bit about the important role that coal and nuclear play in providing not just reliable baseload energy, but also at a predictable and affordable cost?

Mr. Ryder. Well, TVA maintains a diverse mix of energy sources: coal, natural gas, nuclear, hydro, and renewables; and I think it is important that TVA continue to maintain a diverse portfolio of energy sources. As technologies change and as commodity prices for fuels change, that gives TVA the ability to adjust its fuel mix so as to meet its mandated mission of providing low-cost energy for the entire region.

Senator Capito. Some would argue that hydropower should not be considered a renewable energy source from a policy perspective, the same way that wind and solar are. Can you speak about the importance of TVA's hydroelectric assets, their need for upgrades, and how they help the Authority meet its environmental stewardship goals?

Mr. Ryder. Well, hydro is the original source of power for TVA, and there are 29 operating units today. In the last few

weeks, we have gotten a lot of renewal of that resource throughout the Tennessee Valley, so, from my commonsense perspective, it looks to me like it gets renewed every time we have a tremendous amount of rain, snow, snow melt, and whatever else brings the water down the river and enables those hydro plants to work.

My office overlooks the Mississippi River. The Mississippi River is not part of TVA, but I am very familiar with watching the ebb and flow of rivers, the flood stages of rivers. I do this on a daily basis, and this exists not only on the Mississippi, but throughout the Tennessee.

Senator Capito. Thank you.

I mentioned in my opening statement the unfunded pension liabilities and the overall indebtedness relative to the statutory cap. Do you have any perspectives on this and what your priorities might be for reducing that burden?

Mr. Ryder. They do have a tremendous burden, and I have just begun to look at that. TVA has taken some steps to address that, both through increase in the investment yield on the portfolio and in contributions from earnings. They have a long way to go, and that is something that, if I am confirmed, I look forward to looking, well, I don't know if I look forward to it; there are very tough decisions that may have to be made there.

Senator Capito. You mentioned in your law practice that

you did a lot of bankruptcy work.

Mr. Ryder. Corporate.

Senator Capito. Do you have any experience with handling the pension funds outside, in a corporate bankruptcy?

Mr. Ryder. That often is an issue in a Chapter 11 bankruptcy, where there is an underfunded pension liability. Under the bankruptcy code, that takes priority. Here, we are trying to address the problem before we get to insolvency.

Senator Capito. Well, for those hardworking folks, I am sure that is deep in your mind.

Let's go back to coal and nuclear. I know I know this, but I can't recall it up into my mind. Are there scheduled retirements of certain nuclear and coal plants, I am certain coal, within the TVA? Are you familiar with that?

Mr. Ryder. The coal plants, yes. The schedule is to convert, and they are actively in the process of doing that.

Senator Capito. Convert to natural gas?

Mr. Ryder. Convert the coal plants to natural gas. In fact, the plant in Memphis is being converted from coal to natural gas, and I think that gas plant comes online either next year or the year after. They have been working on that for some time. But that is part of an overall program of increasing the amount of energy derived from natural gas, which is now, I think, about 14 percent and is going to rise to as much as 29

percent. The amount of coal declines by a similar amount over the same period.

Senator Capito. And what is the mix for nuclear, do you happen to know?

Mr. Ryder. The mix right now is about 29 percent coal, about 31 percent nuclear. Nuclear and natural gas increase under the plan; coal decreases.

Senator Capito. Does nuclear increase because of modernization of existing plants?

Mr. Ryder. It is modernization. It is principally the Watts Bar Plant that was just brought online and getting that up to full yield.

Senator Capito. Well, thank you.

Senator Whitehouse.

Senator Whitehouse. Thank you very much.

Mr. Ryder, welcome. It is a little odd to even have to ask these basic questions, but let me just get them out of the way.

Do you accept and understand that the carbon emissions from fossil fuel power plants are greenhouse gases that contribute to climate change?

Mr. Ryder. Senator, climate change occurs. Whether it is a result of carbon emissions or not doesn't matter to me.

Senator Whitehouse. Do you think there is a question whether carbon emissions contribute to climate change?

Mr. Ryder. I don't know. I am somewhat of a skeptic. I don't know the science that well on that issue. What I do know is that as a consumer, as a resident of the Tennessee Valley, I am in favor of clean air and clean water, so I think steps should be taken, as they have been taken by TVA, to make sure that our air is clean and our water is pure.

Senator Whitehouse. As a lawyer and as a member of the Board, you may be asked to weigh in on legal questions that the TVA is presented with. There is, I think at this point, unanimous Federal court precedent that when decisions are made that relate to carbon emissions, it is incumbent upon the agency to take into account the social costs, including pollution, that relate to those carbon emissions.

I think we have, at this point, the Ninth Circuit, the Seventh Circuit, and the D.C. Circuit all arrayed on the "yes, you must" side of that, with nobody on the other side, and a considerable array of district court decisions that have corrected agency action where they failed to take that social cost into account or where they presumed that it was zero.

If you are presented by your lawyers a recommendation that decisions by the Board need to take into account that social cost of carbon, will you follow their legal advice and will you accept that, or is there some reason why you would have difficulty with that?

Mr. Ryder. Follow the legal advice of our counsel and follow the precedents that are set by the courts? As a lawyer, that would always be my advice to my client.

Senator Whitehouse. Yes. It is pretty logical advice, isn't it?

What would you suggest to us as markers that we could look to in your performance as a director that you have given renewables, storage -- there is a new FERC storage rule TVA is going to have to react to -- distributed generation, which empowers consumers to take a much bigger hand in their own power control and their own economics, what would be the markers that we should look to you have given those technologies a fair shake against natural gas or coal-generated power?

Mr. Ryder. Well, I am coming here today as a resident of Memphis and west Tennessee, an area that feels that it has been underrepresented on the Board of TVA, even though we account for, as I said, 10 percent of the total population of TVA and 12 percent of its load.

Memphis is uniquely situated in that it has one of the largest urban poor populations in the Country. We have a lot of people that have trouble paying their light bill, so the TVA mission of providing affordable power is very important to my community; it is a very significant concern.

Senator Whitehouse. Facilitating distributed generation

can be an extremely empowering way of addressing that issue.

Mr. Ryder. I want the Board, I want TVA to look at all opportunities to provide low-cost power to the people of my community.

Senator Whitehouse. Including in that cost analysis the social cost of carbon, as your lawyers will recommend to you?

Mr. Ryder. I think when I was taking my economics course in college, those were referred to as neighborhood effects.

Senator Whitehouse. Yes.

Mr. Ryder. And those need to be taken into account.

Senator Whitehouse. Negative externalities, neighborhood effects, whatever, need to be taken into account.

Mr. Ryder. Right.

Senator Whitehouse. Great. Okay, I appreciate it, and I will reemphasize that Senator Corker and Senator Alexander have great respect here in this body. I had the pleasure of serving with my Chairman Alexander on the HELP Committee until I just vacated it to move to the Finance Committee.

The legend in Washington is that the Finance is the more powerful committed, but moving away from Chairman Alexander is a step that one takes reluctantly, because he is a man who likes to get things done and works well with his colleagues, so I appreciate their support for you.

Mr. Ryder. Thank you, Senator.

Senator Capito. Thank you.

Senator Boozman.

Senator Boozman. Thank you.

I would agree, I think we all would agree with your assessment of Senator Alexander and Senator Corker; it is good to have those guys on your team, and we do appreciate the fact that you are willing to do this.

In your opening statement you mentioned the challenges ahead in the energy sector with declining demand in electricity, environmental concerns, which Senator Whitehouse was talking about, the growing importance of the appropriate mix of generation of fuel.

How do you see TVA balancing keeping low rates in the Valley in the face of such challenges?

Mr. Ryder. That is an interesting challenge. At the present time, TVA produces more energy, in fact, than it needs, so it is not looking to outside of its present resources under the present plan of restructuring coal, natural gas, bringing up nuclear to reach outside for any additional sources of energy.

Senator Boozman. That is interesting. I am glad you brought up the fact that -- well, again, coming from Arkansas, your neighbor, there are areas of significant growth in the region, but also there are significant areas of poverty, and keeping rates low for people on fixed income, single moms, the

list goes on and on, is so, so very important.

TVA provides electricity for over 9 million people in the southeast; however, they are tasked with much more than just providing efficient and affordable electricity. You are also tasked with providing flood control, navigation, land management, economic development for the southeastern region.

In your opinion, how does TVA's management of waterways, transportation, forestlands spur the economic development in these areas that desperately need economic development?

Mr. Ryder. Well, Senator, my office looks over the Tennessee River. I look at Arkansas all day, and it is a beautiful State, but Tennessee is also a beautiful State, and it is one of the largest tourist States in the Country, so tourism is a huge industry. Tourism and recreation are huge industries for Tennessee, employing thousands of people, and maintaining those public lands for recreational use is important to the economy of Tennessee, as well as the enjoyment of the citizens of the Tennessee Valley region.

Senator Boozman. You mentioned being from Memphis, being active in that regard, TVA's largest customer. Tell me about your philosophy about TVA working with State and local partners.

Mr. Ryder. I have a strong belief that TVA needs to work very closely with State and local authorities. In fact, one of the reasons I became interested in this position is that I felt

that perhaps on our end of the TVA distribution network we were not always being heard and that it needed to step up its game in terms of working with State and local authorities.

So, my hope is that, if I am confirmed as a member of the Board, that I can help guide the TVA in doing that for those of us who are from areas that are not where TVA has major offices. TVA's corporate office is in Knoxville, Tennessee; its operating facility is in Chattanooga, Tennessee; and over in Memphis we are kind of, well, kind of the red-headed stepchild in Memphis. Senator Wicker knows what I am talking about because he is from the same part of the world as Memphis and I am, and we feel like we kind of get left behind, so I would urge the TVA to step up its game in that regard.

Senator Boozman. Well, I agree with you totally in that regard.

Thank you, Madam Chair.

Senator Capito. Thank you.

Senator Gillibrand.

Senator Gillibrand. Thank you, Madam Chairwoman.

Cybersecurity of the electric grid is a critically important issue. Just last week, DHS and FBI again confirmed that Russian hackers have carried out deliberate and ongoing operations targeting the U.S. energy industry.

The energy grid continues to be a target for those who

would wish to do us harm, and we must continue to ensure that we are doing everything possible to protect the electric grid from cyberthreats.

How will you prioritize cybersecurity as a member of the TVA Board?

Mr. Ryder. Well, cybersecurity and physical security walk hand-in-hand here, and that has obviously got to be a priority in an era in which cyberattacks are possible from whether it is the random hacker in the Ukraine who is just searching for identity theft or whether it is an act perpetrated by a foreign government.

I appreciate the Senator's question. I think that should be a major concern and priority of the Board.

Senator Gillibrand. As it is a major concern and priority, what specific things do you intend to do to secure the safety of the electric grid?

Mr. Ryder. If I am confirmed, that would be something that the Board would have to consider directing the staff to undertake and prioritize.

Senator Gillibrand. I request that you write a letter to this Committee, after you do get confirmed and after you do meet with your Board, about what your actual decisions are, what you intend to do. For example, will you hire experts? Which experts will you hire? Will you put in new technology? Will

you have fail-safe technology? I would like to know a plan, a specific plan. Once you are in a position to create that plan, will you inform this Committee?

Mr. Ryder. We will absolutely inform the Committee any time we are asked to inform the Committee and keep the Committee apprised.

Senator Gillibrand. I would be very grateful for that by letter. Thank you.

The growth and development of renewable energy technology has created great potential for individuals to become energy entrepreneurs by generating their own energy at their home and at their businesses. Currently, the Tennessee Valley Authority, through the Green Power Providers Program, encourages the installation of small-scale renewables and pays a retail rate to homeowners and businesses that participate in this program for every kilowatt hour generated by their system.

Do you support continuing and expanding programs like the Green Power Providers Program, which incentives homeowners and businesses to invest in renewable energy systems on their properties, including solar and wind?

Mr. Ryder. Our part of the world, Senator, is probably more favorably suited for solar than wind, but I think TVA should continue to use renewables as part of its overall mix of energy sources.

Senator Gillibrand. Great. And do you intend to support greater investment in renewable energy technology in the region served by the Tennessee Valley Authority? Why or why not?

Mr. Ryder. One of the mandates under the Act for TVA is to be a leader in innovation, and I would support that.

Senator Gillibrand. That would be terrific.

Energy efficiency is an important component in lower energy costs for consumers by reducing the amount of energy we use. Do you support policies that promote greater use of energy-efficient technologies?

Mr. Ryder. Yes.

Senator Gillibrand. And what role do you envision for the TVA in the energy efficiency space if you are confirmed?

Mr. Ryder. Well, TVA has had a longstanding program of encouraging energy efficiency. Of course, they work through local providers, and I think as long as I have been conscious of the fact, I have received mailers from TVA in my home showing me how to make my home more energy efficient, and that is one of the reasons we face declining demand for electricity.

Senator Gillibrand. It is helpful. Even in my own State, when we have done tours around the State of people who are using energy efficiency, we show how much money homeowners can save, and it is just such a value added, from putting in better windows to having more efficient appliances. It just makes

sense, and I hope you will be a leader in that area because it really helps working families.

Mr. Ryder. It is a matter of energy education.

Senator Gillibrand. Thank you.

Thank you, Madam Chairwoman.

Senator Capito. Thank you.

Senator Wicker.

Senator Wicker. Thank you very much. Glad to be here.

If you don't mind, Madam Chairman, let me make a statement and then I will perhaps --

Senator Capito. Well, okay.

STATEMENT OF THE HONORABLE ROGER WICKER, A UNITED STATES SENATOR
FROM THE STATE OF MISSISSIPPI

Senator Wicker. All right. I don't hear any objections.

I want to congratulate Mr. Ryder for his nomination and thank him for his willingness to serve on this important Board. I want to highlight the impact TVA has had on the quality of life and economic well-being of residents in Mississippi and across the south over the course of its history.

In 1930, nearly 85 percent of homes in large urban areas had electricity, but only 10 percent of rural homes had the same access. In Mississippi, only 1.5 percent of farm homes had electricity, the lowest in the Country.

The creation of TVA as a result of the Act of 1933 was a game changer. The goal was simple: to improve the living and economic conditions of seven southeastern States. My hometown of Tupelo, Mississippi is, of course, the first TVA city and we are still proud of that. By providing affordable electricity to rural communities, TVA was an important economic boost, delivering a needed commodity to one of the Country's poorest regions.

From 1930 to 1940, the number of farm homes in Mississippi with electricity increased from less than 4,700 to more than 27,000 in just a decade.

TVA's positive impact on Americans throughout the south

continues to this day. Anyone who has experienced a power outage can attest to our reliance on electricity; it touches almost every aspect of our lives.

TVA currently provides reliable, clean, and low-cost energy to more than 332,000 households in my State of Mississippi and serves approximately 9 million customers across the seven States. TVA has continued to improve its power generation portfolio, including hydroelectric, coal, natural gas, nuclear, and renewable energy, and I think the previous question touched on that.

In October 2016, TVA announced the completion of the Watts Bar Nuclear Plant in Ray County, Tennessee, a major step for nuclear energy in the United States. This was the first nuclear plant to come online in this century and provides power to approximately 4.5 million homes. TVA's service and efficiency have garnered a remarkable 99.999 percent reliability rating.

So, I look forward to working with you, Mr. Ryder, and want to participate and do what we can at the senatorial and congressional level in TVA's continued success.

Now, let me ask you, if I might, Madam Chair, to just touch on one aspect, and that is the fact that TVA provides power to 154 local power companies, that in turn serve over 9 million homes in the Tennessee Valley. So, in that sense, its customers are actually local power companies that distribute the power at

retail. How do you see this relationship evolving? And what do you envision as the role for the local power companies that are part of the public power model in the Tennessee Valley?

Mr. Ryder. Senator, you are absolutely right, TVA does not, except for some industrial customers, provide power directly to the end-user, it is all through intermediaries, through the local power providers. So they become the focal point for setting rates and for encouraging energy education, energy efficiency. It is important that TVA have a close working relationship with those providers to make sure that TVA is providing them with safe, reliable, reasonably priced energy and that they in turn can pass that on to their consumers.

I am from Memphis, and I am your neighbor.

Senator Wicker. You sure are.

Mr. Ryder. We understand that. Memphis, north Mississippi, west Tennessee are tremendous consumers of the end-product, and we also are home to a lot of people who cannot afford to pay high rates and need to be sure that they are provided with low-cost energy.

We are also, fortunately, home to growing industries, particularly in the automotive world, which have tremendous energy needs. Their need is for reliable power, and the ability to continue to provide power with 99.99 percent reliability is very important to them and important to making sure that there

are good paying jobs for the people of our region.

I also want to note that not only did Tupelo produce the first TVA city, but it is home to The King, and we are very proud of him. We are glad you sent him up our way.

Senator Wicker. Well, we gave him a good foundation in Tupelo and then we sent him on up to Memphis, I guess because there were more guitars up there.

[Laughter.]

Mr. Ryder. Thank you.

Senator Wicker. Thank you very much, Mr. Ryder, and thank you, Madam Chairman.

Senator Capito. Thank you.

Senator Carper. I want to just pick up from our conversation yesterday when we talked about music and ask you to just share with us some of the recordings, famous recording studios in Memphis that we should be mindful of.

Mr. Ryder. Well, you have Sun Studio.

Senator Carper. And who recorded there, whoever recorded there, any idea?

Mr. Ryder. I have not recorded anywhere.

Senator Carper. No, no, no, but who has? Sun is one of the most famous recording studios in the world and it is in Memphis. Who has recorded there?

Mr. Ryder. Johnny Cash.

Senator Carper. Okay, The Man in Black.

Mr. Ryder. Elvis.

Senator Carper. The King.

Mr. Ryder. The King.

Senator Carper. Jerry?

Mr. Ryder. Jerry Lee Lewis.

Senator Carper. Carl?

Mr. Ryder. Carl Perkins.

Senator Carper. Roy?

Mr. Ryder. Roy Orbison.

Senator Carper. "Only the Lonely." Those are all my questions.

[Laughter.]

Senator Carper. Now for the tough questions.

Thank you for the time you spent with us yesterday. You mentioned to my staff and me that you thought it was important for TVA to have somebody on the Board from Memphis, and you explained why. Is there anybody already on the Board from Memphis?

Mr. Ryder. Yes, there is.

Senator Carper. Who is that?

Mr. Ryder. Ron Walter.

Senator Carper. And is Ron Walter doing an adequate job, do you think, representing the interests of Memphis?

Mr. Ryder. I am sorry?

Senator Carper. Is Ron Walter doing an adequate job in representing the interests of Memphis on the Board?

Mr. Ryder. Ron Walter is. He is a good friend of mine. I have known him for many years.

Senator Carper. You are not going to throw him under the bus?

Mr. Ryder. No.

Senator Carper. Okay. All right.

For some time, I have encouraged TVA, as I said in our conversation yesterday, to be an industry leader, not a laggard, especially when it comes to clean energy and to energy efficiency. I have been pleased over the last several years with TVA's commitment to retiring some of their older, dirtier coal power plants and to investing in clean energy. We talked about converting one of the plants there to natural gas.

These clean energy investments have resulted in cleaner air and new economic opportunities for the people of the Tennessee Valley and surrounding areas. For example, I believe Google is starting to break down on a \$600 million investment to build a database at one of TVA's retired coal plants in northern Alabama. Google chose the location in part because the company wants the database to run on 100 percent renewable energy and knew TVA would provide the clean power. This one project is

expected to create about 100 jobs or more.

My question, if confirmed, will you commit to continuing these clean energy investments? Will you commit to ensuring that TVA is a national leader in technological innovation and environmental stewardship?

Mr. Ryder. TVA has a mandate under the TVA Act to be a leader in innovation, and I think it should continue to be a leader in innovation and should move in those directions. Part of the way it does that is by balancing its portfolio of energy resources among a variety of sources and employing the best available technology to ensure that that energy is produced both in a clean and efficient way so as to deliver reasonably priced energy to the ratepayers.

Senator Carper. All right.

We talked a little bit yesterday about coal ash and the terrible incident that occurred several years ago. We talked also about why you wanted to join the TVA Board. You admitted you didn't have any experience in the energy field, but discussed your desire to work on a local issue involving the Allen Fossil Power Plant being converted from a coal plant to a natural gas plant.

You raised the issue of the Allen Coal Plant having an online coal ash pond close to a water source important to Memphis water supply. Here are a couple questions I have that

relate to this.

Without any relevant experience, what would you bring to the TVA Board that would make it better than it is today? What would you have done differently in the Allen Coal Plant situation? Do you support TVA lining all of their coal ash ponds that are near bodies of water that supply drinking water to local communities? Please.

Mr. Ryder. Well, you have touched on a very important issue to the people of Memphis, and that is the conversion of the Allen Coal Plant to a natural gas plant, and it illustrates some of the cost tradeoffs and the problems with any energy source. The Allen Coal Plant is in the process of being converted to natural gas. In order to provide the cooling water for the natural gas at the new plant, TVA drilled a series of wells into the Memphis Sands Aquifer, which is the source of drinking water for the City of Memphis and the surrounding area.

This aquifer is a precious resource for Memphis for generations to come. The aquifer is many hundreds of feet below the surface; it is protected by a barrier of clay, and the water in that aquifer is so pure that you can drink it without treatment. It does not need to be treated at all; you can drink it straight from the aquifer.

Senator Carper. I am going to interrupt.

Mr. Ryder. Yes, sir.

Senator Carper. We had a good conversation about this yesterday, and I appreciate that.

Mr. Ryder. Okay.

Senator Carper. Let me come back to my three questions. I will just go back.

What would you have done differently in the Allen Coal Plant situation? What would you have done differently, had you been a Board member? What would you have the Board do differently in the Allen Coal Plant situation?

Mr. Ryder. I think I would have brought a sensitivity to the concerns of the local community of that, the potential contamination of the water supply, which seemed to be overlooked by TVA.

Senator Carper. Do you support TVA lining all of its coal ash ponds that are near bodies of water, like the one you are talking about, that supply drinking water to local communities?

Mr. Ryder. I think that would have to be examined.

Senator Carper. Okay.

Madam Chairman, my time has expired. I have a question for the record about political contributions. I am going to submit that for the record. But I have just one last question, if I could.

Madam Chairman, when I was governor of Delaware, I served in the National Governors Association, and every year the

governors met in different States. One year we met in Las Vegas and I was telling our nominee yesterday that maybe one of the best concerts I ever heard in my life was at that conference.

Governor Bob Miller lined up for us a show we went to, all the governors and spouses and families, and the opening act was Gladys Knight and the Pips. They were followed by the original Righteous Brothers, and they were followed by the original Four Tops. The guy who closed the show was Chuck Berry, and he closed the show with an encore with a song called "Memphis, Tennessee," and it started off, "Long distance information, give me Memphis, Tennessee."

Would you complete that, please?

Mr. Ryder. It is a great song and my office is just a half a mile from the Mississippi Bridge.

Senator Carper. Fair enough. Thank you.

Senator Capito. You got me on that one.

Okay, thank you, Senator Carper.

I see no more questioners here, so, if there are no more questions for today, members may submit follow-up written questions, which I believe Senator Carper said he was going to do, for the record by the close of business on Thursday, March 22nd.

So, Mr. Ryder, will you please respond to those written questions by close of business on Wednesday, March the 28th?

Mr. Ryder. I can do that.

Senator Capito. Thank you.

I say this hearing is adjourned. Thank you very much.

Mr. Ryder. Thank you, Chairman.

[Whereupon, at 11:02 a.m. the subcommittee was adjourned.]