Ms. Ashley Pilakowski NEPA Specialist Tennessee Valley Authority 400 West Summit Hill Drive Knoxville TN 37902 nepa@tva.com aapilakowski@tva.gov

Re: Comments for the Cumberland Fossil Plant Draft Environmental Impact Statement Concerning the Urgent Need for TVA To Retire Its Fossil Fuel Operations and Advance a Just Transition to Clean, Renewable Energy

Dear Ms. Pilakowski,

We are at a crossroads - for our climate and our communities. Our over reliance on fossil fuels, like methane gas, and ever-rising greenhouse gas emissions are inflicting mass suffering and instability around the world, including right here in the Valley. To preserve a livable planet and for a decent chance at limiting global warming to 1.5 degrees Celsius, the United States must end coal use by 2030 and methane gas production by 2031. That's why the decisions the Tennessee Valley Authority ("TVA") - our country's largest federal utility - makes from here on out are so crucial. They will have lasting consequences for our climate, our communities, and thus our ability to ensure an affordable, safe, equitable and resilient energy future for all people.

From disastrous flooding and tornadoes that ravaged TVA's region, to the winter storm earlier this year that left thousands of TVA customers without power in Memphis, the reality of a rapidly changing climate could not be more clear. These storms and climate events will only become more frequent and intense with prolonged dependence on fossil fuels and insufficient action from mega-polluters to cut greenhouse gas emissions. TVA is one of the country's largest emitters - ranking in the top 10 among the 100 largest electric power producers – averaging 50 million tons of CO<sub>2</sub> emissions. We appreciate TVA has made some progress in reducing its massive carbon footprint, but the agency lacks urgency in confronting the climate emergency head on, and in fact is moving in the opposite direction evidenced by recent considerations of additional methane gas buildout.

See Rich Countries Must End Oil and Gas Production by 2034 for a Fair 1.5°C Transition, Institute for Sustainable Development, (March 22, 2022), <a href="https://www.iisd.org/articles/analysis/rich-countries-must-end-oil-and-gas-production-2034">https://www.iisd.org/articles/analysis/rich-countries-must-end-oil-and-gas-production-2034</a>.

Christopher Van Atten, Amlan Saha, Luke Hellgren, and Ted Langlois, *Benchmarking Air Emissions Of the 100 Largest Electric Power Producers in the United States*, CERES, (July 2021), https://www.ceres.org/sites/default/files/reports/2020-07/Presentation of Results 2020.pdf.

Tennessee Valley Authority, TVA Charts Path to Clean Energy Future, (May 6, 2021), <a href="https://www.tva.com/newsroom/press-releases/tva-charts-path-to-clean-energy-future">https://www.tva.com/newsroom/press-releases/tva-charts-path-to-clean-energy-future</a>.

We therefore submit these comments urging you, as leaders of the Tennessee Valley Authority, to put the climate and Tennessee Valley residents first by considering an additional alternative that would expedite the retirement of all Cumberland coal units by 2030 and maximize clean, renewable energy, including distributed solar, energy efficiency, and battery storage. Importantly, the alternatives that TVA considers must center on justice and equity and minimize negative environmental impacts.

It is well past time that TVA takes a leadership role on climate and begins living up to its mandate to steward the Tennessee Valley and improve the quality of life of its customers. That starts with accelerating the clean, renewable and just energy transition and decarbonizing at a more rapid rate than what the utility currently aspires to. Reaching 80% carbon emission reductions by 2030 simply isn't good enough when that goal contravenes climate science and even the President's own federal climate and clean energy mandate.

Furthermore, TVA must come to terms with the disproportionate impact its policies have on Black, Brown, and low-wealth communities in the Tennessee Valley.<sup>4</sup> From high energy burdens to increased exposure to health hazards like coal ash, these communities are on the frontlines of TVA's pollution and the climate emergency. TVA's energy transition *must* prioritize real solutions that advance energy equity in the Valley by lowering energy burdens, expanding distributed renewable energy like solar and storage that makes communities more resilient, prioritizing a just transition for workers, and ensuring meaningful public participation over energy decisions.

This transition is also a massive opportunity for TVA to lead the country as a clean energy pioneer. TVA's own statute asserts that the agency shall serve "national leader[ship] in technological innovation, low-cost power, and environmental stewardship." While the utility's current policies fall short of this mandate, TVA can take action today to set the stage for a just transition away from fossil fuels and onto 100% clean, renewable, safe, and affordable energy.

We look forward to TVA addressing the following suggestions.

## I. TVA should replace its fossil fuel generation with clean, renewable energy systems in line with climate science and customer demands.

We are encouraged to see that TVA has begun the process of retiring its coal fleet, which is much needed. However, rather than prioritize clean, zero-emission replacements like solar and storage, the alternatives TVA is considering for increased methane gas development, as exhibited in the Cumberland Draft Environmental Impact Statement ("DEIS"), suggest TVA is moving in the opposite direction. TVA's troubling record of coal ash mismanagement concerns us and demonstrates that the agency is turning a blind eye to climate science, the federal government's clean electricity mandates, and especially the

Chris Carnavale, *Just How Unaffordable is Energy in Memphis?*, SOUTHERN ALLIANCE FOR CLEAN ENERGY, (March 20, 2020), <a href="https://cleanenergy.org/blog/just-how-unaffordable-is-energy-in-memphis/&sa=D&source=docs&ust=1643996045558896&usg=AOvVaw05faJb6yM8SQfSDt6SMaQT">https://cleanenergy.org/blog/just-how-unaffordable-is-energy-in-memphis/&sa=D&source=docs&ust=1643996045558896&usg=AOvVaw05faJb6yM8SQfSDt6SMaQT</a>.

<sup>&</sup>lt;sup>5</sup> 16 U.S.C. § 831a(b)(5).

concerns and demands of TVA customers by recommending further investments in polluting fossil fuel infrastructure.

The DEIS for Cumberland is flawed for several reasons. The evidence provided is insufficient to determine whether the alternative recommended is actually what TVA needs to maintain reliability in its system. The replacement alternative recommended in the DEIS, a Combined Cycle ("CC") gas plant with a new gas pipeline, is also the highest greenhouse gas (GHG) emitting alternative. TVA used a flawed assessment of climate impacts because the DEIS compares emissions from a new methane gas plant to continued operation of the coal plant, instead of clean, renewable energy alternatives like solar and storage.

Further, the DEIS states that the new gas plant can come online sooner than other alternatives, but that is only because TVA has already set the process in motion to look at pipeline routes and locations with the Federal Energy Regulatory Commission (FERC) for a potential plant that has not yet been chosen as the final option. This is very concerning to us as given what should be a fair and transparent process appears to have a clear favored option.

To rectify this, TVA could still issue bids on proposals for solar and storage projects to meet requirements for Alternative C, as has already been done for Alternative A. Simply put, TVA does not need more gas to integrate renewables, as has been stated publicly. TVA already has a large hydro fleet which could be used to integrate variable renewable assets like solar and wind.

Another flaw in the DEIS for Cumberland lies with claims that any replacement for Cumberland must be capable of meeting peak capacity year round, and serve large energy needs. That being said, recent trends suggest the plant generates roughly twice as much in summer months as in winter months, which happens to be very similar to solar generation shapes in the region.<sup>6</sup> This is yet another reason solar and storage should be more seriously considered as a replacement at Cumberland, not to mention distributed or rooftop solar that was dismissed as an option early on because of assumed additional costs.

II. TVA's resistance to rapid decarbonization disproportionately impacts communities of color and low-wealth communities, and the agency must prioritize a transition to clean, renewable energy that centers justice, equity, and resilience and ensures renewable, low-cost energy for all.

An energy crisis is rapidly unfolding in the South, especially in the Tennessee Valley, due in large part to TVA's continued reliance on coal, gas, and other false energy solutions. Households in the TVA footprint have some of the highest electricity bills in the country, as high as \$200 in some states.<sup>7</sup> Alabama households, in particular, pay more per month for electricity compared to any other state, with Tennessee, Mississippi, and Georgia households close behind.<sup>8</sup> Furthermore, the impact of these high electricity costs

Maggie Shober, *TVA plans to replace Cumberland coal plant with another fossil fuel*, SOUTHERN ALLIANCE FOR CLEAN ENERGY, (May 2, 2022), <a href="https://cleanenergy.org/blog/tva-plans-to-replace-cumberland-coal-plant-with-another-fossil-fuel/">https://cleanenergy.org/blog/tva-plans-to-replace-cumberland-coal-plant-with-another-fossil-fuel/</a>.

Highest Electricity Bills in the US: 15 Cities Where the Heat is On, COMMODITY.COM, (Oct. 27, 2021), <a href="https://commodity.com/blog/cities-electric-bills/">https://commodity.com/blog/cities-electric-bills/</a>.

are not equitably distributed, with Black households experiencing a disproportionately high energy burden. Low-income households in Memphis suffer one of the highest energy burdens in the country – half the low-wealth households pay more than 13.2% of their income for electricity. 10

Despite reliable energy options like rooftop solar that would help alleviate this energy burden, accelerate decarbonization, and build community and climate resilience in the Valley, TVA has not explored these energy solutions in the DEIS or other planning. Instead, the agency has implemented policies that make it harder and even discourage residents from affordable renewable energy. This is fundamentally inconsistent with TVA's mission to provide affordable and clean power to all its customers. Furthermore, these households are on the frontlines to the persistent harms from TVA's fossil fuel dependence. TVA's planned gas buildout - including at Kingston, Cumberland, and Johnsonville - will only lead to more environmental and energy justice violations.

Methane gas is an environmental racism hazard. The proportion of Black residents living within three miles of a power plant is higher for gas than for coal (13.4% compared to 8.1%).<sup>11</sup> And, these communities are also disproportionately exposed to harmful methane and other pollutants. TVA's continued reliance on coal and gas plants therefore presents significant environmental and public health consequences.

In addition, NOAA's recent "Annual Greenhouse Gas Index" reported that methane has broken records by increasing more rapidly than it has since the early '80's. A third of that methane comes from oil and gas production, an area readily subject to human control. The report's depressing conclusion is that greenhouse gasses trapped nearly 50% more heat last year than they did in 1990. Instead of racing toward destruction, TVA should be pulling back on its demand for natural gas and replacing it with renewables as quickly as possible.

TVA claims that gas is a bridge to more renewables, despite overwhelming evidence to the contrary. The DEIS notes that "TVA has also selected Alternative A as its preferred alternative because the proposed CC plant at CUF provides the flexibility to reliably integrate 10 GW of solar onto the system by 2035 and enables the CUF coal-fired units to be retired on an accelerated schedule." However, TVA has yet to provide a plan for how it plans to achieve this. Even more, recent studies have demonstrated that transitioning from coal to renewables makes economic sense. <sup>12</sup> Instead, TVA risks burdening its customers

<sup>&</sup>lt;sup>9</sup> US Department of Energy, Low-Income Energy Affordability Data Tool, ENERGY.GOV <a href="https://www.energy.gov/eere/slsc/maps/lead-tool">https://www.energy.gov/eere/slsc/maps/lead-tool</a> (last visited Jan. 25, 2021).

Dave Flessner, TVA pledges to help consumers cut \$200 million in annual energy bills with targeted efficiency programs, CHATTANOOGA TIMES FREE PRESS, (May 11, 2022), <a href="https://www.timesfreepress.com/news/business/aroundregion/story/2022/may/11/tva-help-consumers-cut-energy-bills/568781/?utm">https://www.timesfreepress.com/news/business/aroundregion/story/2022/may/11/tva-help-consumers-cut-energy-bills/568781/?utm</a> medium=email#.

Chandra Farley, John Howat, Jenifer Bosco, Nidhi Thakar, Jake Wise, and Jean Su, *Advancing Equity in Utility Regulation*, LAWRENCE BERKELEY NATIONAL LABORATORY, (November 2021), <a href="https://escholarship.org/content/qt1mr715sx/qt1mr715sx.pdf">https://escholarship.org/content/qt1mr715sx/qt1mr715sx.pdf</a>.

Matthew Gray, *Fuel Switching 2.0: Carbon Price Index for Coal-to-Clean Electricity*, TRANSITIONZERO, (May 10, 2022), <a href="https://www.transitionzero.org/blog/fuel-switching-coal-to-clean">https://www.transitionzero.org/blog/fuel-switching-coal-to-clean</a>.

with millions in stranded assets and years of price volatility as gas becomes obsolete in the coming decades. TVA customers deserve a utility that will truly serve the public interest and improve their quality of life. As the largest public utility in the country, TVA must advance a clean, renewable energy system that addresses the socioeconomic and racial inequality facing the communities it serves. TVA must commit to a *just* transition to 100% fossil fuel-free energy by 2030 by maximizing distributed and decentralized clean, renewable power and ensuring a just transition for workers.

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We look forward to hearing your response. In the meantime, please contact the Clean Up TVA Coalition, team@cleanuptva.org, should there be any further information we can provide.

Sincerely,

## **Clean Up TVA Coalition**

Southern Alliance for Clean Energy (SACE)
Appalachian Voices
Center for Biological Diversity
Sierra Club
Sunrise Movement
Sunrise Knoxville
Sunrise Nashville

Sowing Justice

Statewide Organizing for Community Empowerment (SOCM)

Knoxville Democratic Socialists of America

Energy Alabama

Tennessee Interfaith Power and Light

Memphis NAACP

One Knox Legacy Coalition

See Philip J. Landrigan, M.D., et al., *The False Promise of Natural Gas*, New England Journal of Medicine, (January 9, 2020), <a href="https://www.nejm.org/doi/full/10.1056/NEJMp1913663">https://www.nejm.org/doi/full/10.1056/NEJMp1913663</a>. See also Kavya Balaraman, Close to \$16B in gas investments could be stranded with a net-zero by 2050 timeline, report finds, Utility Dive, (October 19, 2021), <a href="https://www.utilitydive.com/news/close-to-16b-in-gas-investments-could-be-stranded-with-a-net-zero-by-2050/608510/">https://www.utilitydive.com/news/close-to-16b-in-gas-investments-could-be-stranded-with-a-net-zero-by-2050/608510/</a>.