

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY**

SUMMARY OF ORAL PUBLIC COMMENT

**PUBLIC LISTENING SESSIONS,
FEDERAL CLEAN POWER PLAN FINAL RULE**

INTRODUCTION

On August 13, 2015, the Virginia Department of Environmental Quality (DEQ) announced a public comment period and a series of informal listening sessions on the U.S. Environmental Protection Agency (EPA) Clean Power Plan (CPP) to cut carbon emissions (greenhouse gases, GHG) from existing power plants that generate electricity from fossil fuels. DEQ sought general input from the public on the best way for the Commonwealth to implement EPA's plan.

PUBLIC PARTICIPATION PROCESS

Public listening sessions were held as follows:

- September 16, 2015: DEQ Valley Regional Office, Harrisonburg, VA.
- September 22, 2015: DEQ Blue Ridge Regional Office, Roanoke, VA.
- September 28, 2015: Fairfax County South County High School, Lorton, VA.
- September 30, 2015: Henrico County Government Center, Henrico, VA.
- October 1, 2015: Mountain Empire Community College, Big Stone Gap, VA.
- October 6, 2015: Tidewater Community College, Portsmouth, VA.

In addition, written comment was accepted from August 13 to October 13, 2015. Written comments are summarized in a separate document.

SUMMARY OF ORAL COMMENT

296 persons attended the listening sessions, with 174 persons offering comment. If a written copy of a statement was provided, a summary of that statement is provided in the summary of written comment.

**September 16, 2015
DEQ Valley Regional Office, Harrisonburg, Virginia**

Commenter: Joy Loving, CAAV

Comments: Solar Co-ops in VA can point the way to CPP compliance. A member of the CAAV and helped organize Solarize Harrisonburg which resulted in 68 houses going solar; now helping organize the MRSC. Believes net metering should be more widely available and is not available to everyone right now due to current law. Hopes DEQ will work with utilities and legislature to incorporate renewables into our CPP.

Commenter: Leslie Grady Jr., PE, PhD

Comments: CPP has modest goals and is inadequate to meet our needs but since it is the only option, VA response needs to be as strong as possible and exceed mandated reductions. Prioritize carbon free electricity and provide more incentives. Also, offshore wind needs to be developed and Dominion needs to be pushed to develop their portion as rapidly as possible. Incentives should be provided for offshore energy development to reduce risk and speed development. Households of low or moderate income need to be shielded from the increased costs associated with the shift to carbon free energy. Programs need to be developed to retrofit older homes and bring them into a higher energy standard and decrease energy use. Similar programs to help small business community to adapt them to the need to use less energy.

Commenter: Jeff Nicholson, Sigora Solar

Comments: Renewable energy is the reliable resilient fixed price energy source to put VA ahead of its neighbors. Virginia has 14 MW of installed solar capacity while MD has 275 MW and NC has over 1,000 MW of solar installed. A lack of state level incentives and clear solar policy is putting us behind in solar capacity and solar job creation. Solar is quickly becoming the cheapest type of energy generation to install but is one of the most labor intensive so it's a cost effective way to put people to work. Direct CPP toward renewable energy to see an increase in economic impact and don't wait until 2022 to achieve our goals in the CPP. Utilize the new early bird bonus in CPP and emission rate credits available through clean energy incentive program by building renewable capacity ASAP.

Commenter: Matt Rusero, Program and Policy Officer at Secure Futures

Comments: CPP is a way to respond to climate change by not significantly changing the way we operate today but by allowing businesses to take the lead in using renewable energy. It is a way to jumpstart the Virginia economy without relying on federal spending. North Carolina and Maryland combined had \$850 million in private investment in renewable energy while Virginia only had \$15 million. Also wants the early bird special for the CPP. Virginia Beach is the second most vulnerable to sea level rise and the problem will be \$12-\$80 billion to resolve. Invest in renewable energy, energy efficiency, offshore wind, and be first into the market and take advantage of early credits to meet CPP goals.

Commenter: Eleanor Labiosa, Citizen

Comments: Has COPD and asthma due to smoking. Mountains are going to trap carbon in the valley from industry that come in and setup shop on our farm lands. Need

to have industry use convertibles to help filter the air. Solar, wind, hydroponics, digesters are better.

Commenter: Cammie Tutwiler, Public Relations representative and Preston Knight with SVEC on behalf of SVEC president and CEO Myron Rummel

Comments: SVEC serves 12.5 member owners per mile of line in 8 rural counties. Two important points to consider in regard to CPP: cost and reliability. The EPA proposal will cause an increase in electric rates affecting people who cannot afford it and are already living on fixed incomes. Too many unknowns still exist in the CPP and the increased costs put pressure on commercial and industry to locate businesses elsewhere and affects jobs. We need enough generation capacity to keep electricity flowing; the reliability safety valve does not go far enough to address reliability concerns.

Commenter: Cathy Strickler, Citizen

Comments: Here to address the long lasting ramifications of decisions to implementing CPP. Each decision has consequences and we have to take responsibility for consequences of those decisions. Acknowledge the ethical responsibilities that are part of CPP and be strong against those that do oppose climate change.

Commenter: Jane Twitmyer, Citizen and Consultant

Comments: Virginia has spectacular renewable energy resource as outlined in a NREL GIS report including: Offshore wind capable of producing 4 times the GW hours used in 2012 and a production potential of rural solar larger than that. In addition, rooftop solar could meet Dominion summer peak demand. However we are not using them and primary utilities say EPA's plan will increase cost of electricity, hurt economy, and hurt reliability of power supply. This is false. Dominion believes they need 4,000 MW of power by 2021 but more efficient buildings would decrease that demand. Virginia energy rules do not allow for third party energy contracts and that is hindering businesses (such as Ikea) trying to go solar. Shale gas revolution is not durable, research into well production shows peak production will be reached in 2018. Fracking also uses massive amounts of groundwater, has caused groundwater pollution, earthquakes, and the wastewater cannot be treated. A 50% reduction in GHG emissions from using natural gas is not an accurate comparison when well heads are included. Methane from natural gas is 75 times more potent than CO₂. VA should join RGGI to meet EPA CPP reductions. From 2009-2013, RGGI businesses saved \$395 million on electricity bills and regional economies have grown 8%. Hope administration will review the pitfalls of Dominions proposal for all gas and increased nuclear on the fault line.

Commenter: Dave Pruet, Citizen

Comments: The German government heavily subsidizes rooftop solar and now solar contributes 22% of Germany's electrical needs. America lags far behind other countries and Virginia lags far behind America. Grassroots organizations are taking the lead, for example Solarize Harrisonburg where 68 households, including his, installed solar PV

and spawned the MRSC. Solar is good for the air, water, and economy. Encourages DEQ to change from fossil fuels to clean energy and promote energy efficiency.

Commenter: David Rampy, Citizen

Comments: Now is the time for McAuliffe and his administration to use all provisions outlined in CPP and for Virginia to embrace the CPP and lower carbon emissions by reducing dependence on fossil fuels and turning to alternative energy sources. Rising temperatures and sea levels along coastal Virginia is an indisputable problem that will cause economic strain due to adapting, rebuilding and possible relocation. Additionally, due to military presence in Virginia coastal area, sea level rise will also affect national security. Virginia response to CPP must use solar and wind energy, we cannot be locked into years of dependence on natural gas. While cleaner than coal, natural gas emits large levels of methane which affect global warming. More pipelines and power plants are not the answer; need clean and renewable energy and energy efficiency. We can create tens of thousands new jobs and become a clean energy leader.

Commenter: Maria Dettart, UVA Student and Citizen

Comments: The McAuliffe administration must embrace bold climate action in Virginia, action that lowers carbon emissions and avoids natural gas. Find a path to join the 9 state RGGI. Use a mass based plan that caps total carbon tonnage from new and existing sources is the simplest solution but only covering existing sources increases probability that vulnerable communities will see an increase in fossil fuel pollution. Making the plan trade ready increases flexibility and provides economic incentives to reduce carbon pollution cost. Mass based plan should include open auction of 100% of allowances and the proceeds should be used to jump start Virginia clean energy economy, flood protection measures, and expand energy efficiency programs. Avoid locking ourselves into a natural gas agreement because new gas pipelines and power plants are the wrong solution for VA. By not participating in RGGI and lowering CO₂ cap by 2.5% each year, VA is leaving \$250 million on the table and 2.8 billion in auction allowance proceeds through 2030. RGGI states have seen great success with the program dropping emissions 35% and producing \$1.3 billion in net present value from 2012-2014 and adding 14,200 additional jobs.

Commenter: Jerry Scripture, Citizen

Comments: CPP not universally accepted; some states are filing suit and questioning EPA's regulatory authority to implement this plan. The Southern Legislative Conference of the Counsel of State Governments says the EPA CPP interferes with states right to regulate electricity within their borders and ensure a reliable and affordable supply for their citizens. Be very cautious about implementing the new rules. Congressional budget office says cutting CO₂ emissions by 15% would cost the average household \$680 so be mindful of those least able to pay. EPA gave 15 years to reach new goal of 32% reduction. VA has had a 50% reduction in CO₂ output in the last 15 years. Therefore, if we stay on the same track we are on, we'll reach the standard. That reduction is because of increased natural gas usage so it's not all bad.

Commenter: Ralph Grove, Chair of Shenandoah Group of Sierra Club

Comments: Virginia needs to implement a strong and proactive climate protection plan. Climate change is a serious threat to society, especially to poor and minority communities, with threats of melting glaciers, drought and increased fire risk in the Midwest, and coastal flooding due to rising sea levels. Reducing carbon pollution and moving toward renewable energy will save us money, create jobs, and strengthen the economy. We have a moral obligation to leave the world in a livable state for generations to come. Need to develop a plan that actually reduces carbon pollution from all Virginia sources. Consider joining RGGI and use a carbon tax so the market can drive the change. Finally, economic benefits of these changes should come back to the residents of VA instead of into the pockets of utilities.

Commenter: Sydney Bullock, Social Work Major at JMU

Comments: Has family and other people in the same neighborhood that have contracted rare forms of cancer; the neighborhood is next to a power plant. As a social work major, views climate change through a humanitarian lens, like health issues everyday people suffer from simply due to their geographic location. Therefore it's important to incentivize alternative energies and penalize companies that pollute the air.

Commenter: Doug Hendren, Physician and Citizen

Comments: The Valley is one of the most highly affected areas in the county in regard to particulate matter in the air. Climate change is indisputable and urgent with rising temperatures and sea levels that are costly problems. The Asthma and Allergy Foundation of America has Richmond listed as the asthma capital of the US. Our health will be improved by transitioning away from fossil fuels. Harvard School of Public Health study says the attributable cost that American taxpayers pay every year for breathing smoke from coal plants is \$500 billion; therefore coal is not cheap! VA can do better by supporting solar legislation, allowing unlimited net meter, permit solar coops, and stopping Dominion from blocking us from entering a new economy and future.

Commenter: Ruth Jost, Attorney and Citizen

Comments: Virginia has reasons to be concerned. Due to our temperate climate, we will become a spot for internal migration as people flee other parts of the country. The CPP is a minimum; we should have a stronger plan because the IPCC study did not include permafrost melt which releases a lot of methane and also did not include acceleration in land/ice melting. We are seeing the effect 40 years after what we put in the air. Don't let CPP limit what we can do, let's get ahead and stay ahead.

Commenter: Chase Milner, VA Industrial Hemp Coalition

Comments: Todd Haymore, VA Secretary of Agriculture and Forestry, stated that the McAuliffe administration believes industrial hemp will be the crop of the future. Hemp is important for the CPP as a feed stock for energy production. Hydrocarbons in hemp can be used as a biomass energy source in fuel pellets or liquid fuels or gas and it's

estimated that hemp can reduce GHG emissions by 85%. Hemp crops yield 10 tons per acre in 4 months, are drought resistant, and have a heating value between 5,000-8,000 BTU/lb. Also hemp can be used as an insulator in the housing sector. Hemp bio-charcoal has the same heating value as coal and virtually no sulfur, therefore no acid rain risk. Also, a 50% blend of hemp with coal reduced sulfur emissions by 1.6 lbs sulfur/MMBtu. VA CPP should employ hemp as a feed stock if wants to meet 30% emission reduction. The General Assembly passed the VA industrial hemp research act of 2015 and JMU is researching hemp as a biofuel. VTech is also exploring the potential of hemp biomass as a forest product extender to meet wood pellet energy market demands at home and abroad. The CPP needs to be bio-regionally focused and allow for subsidies to include industrial hemp as a feed stock for biomass. To stimulate economy, CPP should prioritize and promote applied research and development integrated hemp biomass energy demonstrated projects at public universities, new energy production and manufacturing processes, and provide economic incentives for renewable energy crops.

Commenter: Jenny French, President of SUNRNR of Virginia

Comments: Manufacturer small backyard solar generators. They are creating jobs, increasing VA exports, and can make an immediate impact by reducing household grid use by at least 5% /unit.

Commenter: Jonathan Lantz-Trissel, Citizen

Comments: Put forward a strong CPP that goes beyond the minimum set by EPA. EMU and 15 other private and public colleges and universities in VA have vowed to reach climate neutrality by 2050, some as early as 2035. Aggressive CPP will help higher education sector stay competitive in attracting students compared to surrounding states. Jobs in clean energy sector are growing and VA CPP can help universities research clean energy projects that in turn help state meet CPP goals.

Commenter: Eugene Stoltzfus, Citizen

Comments: The EPA put forth a CPP on behalf of the citizens in this country because of cross state air pollution and is an example of government doing its job. People are doing more to reduce energy consumption including using more efficient appliances, houses, and cars, and energy generation needs to match with that by using less fossil fuel and more clean energy. Need the centralized generation as Dominion does and continued and encouraged distributed generation that net metering allows.

Commenter: Janet Trettner, Citizen

Comments: Support for EPA CPP and for VA to become a clean energy state. Heard a politician state 'we need to move to clean energy in the future', disagrees, we need to move now. About half of Virginia electricity is produced by coal and there are issues associated with that including: mountain top removal, contamination of streams and rivers, and storing coal mining waste. There is no such thing as clean coal. While the upfront cost of solar energy is somewhat high, there are no externalities like with coal

use, therefore that cost could be used to subsidize clean energy for low income households. Embrace clean energy now, price is right and health and environmental consequences of not doing so are happening now.

Commenter: Sarah Bucci, State Director with Environment Virginia

Comments: Environment Virginia has strong support for CPP and the framework it provides Virginia to tackle our own global warming emissions and promoting energy efficiency. Virginia can go above and beyond the minimum requirements of the CPP and that will help grow the Virginia clean energy sector, diversify the economy, save consumers money through efficiency, and protect public health. CPP can help us move forward with more renewable energy installations and help VA become a leader in renewable energy production. Study showed Virginia VA ranked 30th for total PV capacity behind North Carolina which was 4th and just ahead of DC which was 31st but has a total land area < 1% of VA. The EPA plan rewards early action so VA should take advantage of the extra credit we can get for early action and renewable use.

Commenter: Kit Johnston, Citizen

Comments: Supports CPP and agrees with most previous speakers. Oppose natural gas pipelines that are suppose to cross Virginia.

Commenter: Dennis Atwood, Shenandoah County coordinator for the MRSC

Comments: DEQ cannot accomplish its mission by just adopting the goals of the EPA CPP. EPA CPP is deficient because it allows for an over-reliance on natural gas, a GHG. The currently proposed large scale pipeline projects in VA will introduce huge amounts of natural gas as well as cause significant damage during construction and spill risk during operation to fragile and high value environments including mountain forest, streams, wildlife recreation areas, and farms. Approval of pipeline projects is a failure at environmental protection. Increase renewable energy adoption instead, adopt RGGI, and get off the floor set by CPP.

Commenter: Sandy Greene, Coordinator for Augusta County Solar Coop

Comments: Has 26 solar panels on their barn. DEQ can lead and the people are happy to follow but if they can't, the people can lead as well.

Commenter: Sue Gier, Citizen

Comments: Ask state government to modernize the commonwealth's electrical power model. Traditional model of the power company as a monopoly responsible for generation, storage, and delivery of electricity worked well in the beginning but now it's time to make it more free market (i.e., rooftop solar). Local storage still a problem and the grid still makes sense to have as a monopoly. Power generation doesn't need the economies of scale we had in the past (i.e., pipelines); the power company model needs to be replaced by the electric grid company model.

Commenter: Erich Knight, Agricultural Consultant

Comments: Supports CPP because he's tired of being laughing stock of the world and the CPP is not nearly enough but at least it's a start. France has set a carbon farming program to raise soil carbon by 0.4% per year and puts them on track to be the first country to be carbon negative. Virginia can pay farms to build soil carbon and it will help reduce carbon in atmosphere and then farmers can make money.

Commenter: Larry Korte, Citizen

Comments: Don't build more generation, emphasize energy efficiency savings instead. He has a solar installation and the Dominion power net metering requirements and contracts were the hardest part of the process. Virginia doesn't participate in the clean energy credit market with a RPS so SRECs have to be sold to other states. Solar and wind provide significant and long lasting jobs and revenue. Wants Virginia to: encourage these types of renewable projects, join neighboring states with a RPS and provide SRECs to the market, allow solar leasing programs, provide solar tax credits and rebates, allow and encourage community solar projects, demand offshore wind generation, and join neighboring states in the carbon trade system. New pipelines have detrimental consequences.

Commenter: Heather Lantz, Citizen

Comments: Virginia CPP is a start and it needs to be as strong as possible. Virginia has been given a clear opportunity to limit the impacts of climate change and to reduce carbon pollution. Need a CPP that prioritizes increasing energy efficiency in homes and offices and maximizes the potential for clean renewable energy like wind and solar. Need to catch up with Maryland and North Carolina in solar installation. Need a CPP that puts children and their futures first.

Commenter: Zach McDonnell, Citizen

Comments: Dominion and ODEC fear competition. Beyond what the regulations mean for climate and our livelihoods, it's in our best interest as consumers to have solar and wind drive our energy market. Energy utilities not interested in what we think, they are interested in what shareholders think. Solar co-ops are a way to take back the way we use energy. Rate hikes will affect low income communities but to say our current energy situation is better is a lie because these low income people suffer by being the ones working on the pipelines or in the coal mines to bring that energy to us.

Commenter: Rob Alexander, Citizen

Comments: CPP should promote innovative solutions and competition is extremely important and a root problem for alternative energies to take hold. In regards to low income populations, it's likely that utilities will speak loudest and hold those communities hostage and they'll have to deal with increased prices and that's why this rule can't work. But how do you place restrictions on utilities, pay for those restrictions, but then protect people from potentially increased rates? As part of plan, use institutions of higher education as incubators for innovation and increase funding for technical and public policy R&D.

Commenter: Diane Korte, Consultant and Citizen

Comments: Knows about measurable impacts to low income populations due to their housing. Helps with the Next Step program that replaces pre-HUD code mobile homes, the most vulnerable homes on the grid, with energy star homes. The electric utilities are even helping with the project (i.e., TVA in Kentucky and Tennessee). There are roughly 2.5 million pre-HUD code mobile homes. CPP can support these people by helping with projects like this.

Commenter: Micah Shristi, Citizen

Comments: Has a solar array and is selling power to Dominion for \$0.15/KWh, so we do have net metering in VA. Before demonizing Dominion Power, we have a lot of space to work within. Dominion staff was nice and easy to work with. In general, Virginia can do better in solar.

September 22, 2015

DEQ Blue Ridge Regional Office, Roanoke, Virginia

Commenter: Mark Hanson, Renewable Energy and Electric Vehicle Association (REEVA)

Comments: Mark Hanson supports a mandatory Renewable Portfolio Standard (RPS). A RPS would solve barriers consumers installing their own solar systems are encountering with utility companies. A mandatory RPS would open the door to wind power, and wind power creates more jobs than coal or natural gas electric power plants.

Commenter: Hannah Wiegard

Comments: Hannah Wiegard is the Virginia Campaign Coordinator for Appalachian Voices but said that her comments reflect her own personal views. She supports the federal standards limiting carbon pollution from power plants and wants Virginia to diversify its energy sources to realize its renewable energy potential. Ms. Wiegard is concerned that Virginia will miss out on new opportunities that should come as a result of the CPP, and will instead become more reliant on fracked natural gas, which has negative environmental and fuel price consequences that do not seem to be accounted for in the CPP process. She is also concerned about red herring statements she has heard from utility companies about electricity costs and reliability problems. Virginia should go beyond the standards, reduce energy usage, and thereby save energy costs. Virginia also needs a more open market for solar energy to catch up with other states. Ms. Wiegard is concerned that Appalachian Power's preferred plan – its hybrid resource plan - calls for adding 836 MW of combined cycle natural gas by 2029 while only planning for 510 MW of solar energy, even though solar energy is becoming cheaper. The CPP, especially the clean energy incentive program, should open the door for energy solutions in Virginia, and DEQ should incorporate those elements into the state plan to benefit Virginia economically while setting the state on the path to long

term emissions reductions. She also wants Virginia to take advantage of the double credit for rapid early energy efficiency operations and to look at a multistate mass based compliance option for generating revenue. Finally, Ms. Wiegard hopes that as Virginia's energy landscape changes DEQ will engage utility stakeholders and utility customers in the process. A constructive dialogue should begin now.

Commenter: Dan Crawford, Chair, Roanoke Group Sierra Club

Comments: Dan Crawford said that in the 1970s he was concerned about greenhouse gases, he celebrated solar panels on the White House and the 55 mph speed limit, there were tax incentives in Virginia for solar, and wind farms sprang up in California. We were on the right path, but it did not last, and now his concern has turned to alarm. Action is needed, but is impeded by misinformation from the fossil fuel industry. He is opposed to natural gas, which requires gas pipelines. Substituting natural gas for coal will make climate change worse because natural gas use results in the escape of methane, an extremely potent greenhouse gas. We must transition to renewable energy and increase energy efficiency, which will mitigate climate change and create economic rewards. Governor McAuliffe has said that energy efficiency could create up to 40,000 jobs, offshore wind could create up to 10,000 jobs, and solar could create up to 14,000 jobs. The choices should be easy, but they are not because of big money.

Commenter: Rod Adams

Comments: Rod Adams has been working in the clean energy field since 1981. His first experience was working with nuclear reactors on submarines. In 2010 he retired from the Navy and joined Babcock & Wilcox working on small nuclear reactors – a project that has been shelved because the nuclear revolution was derailed by the fossil fuel industry, specifically the increased production of natural gas due to the use of hydraulic fracturing and horizontal drilling. This has created a temporary glut of natural gas and has made it harder for nuclear power to compete. In Virginia there is a nuclear project under way – Dominion's North Anna Unit 3 – which will generate about 1,400 MW of clean reliable power, create jobs during and after construction, keep power prices low, and keep the air cleaner. Virginia has the nexus of a strong nuclear industry and there is an opportunity for more.

Commenter: Anne Lusby-Denham

Comments: Anne Lusby-Denham is part of Preserve Roanoke and Represent.Us. The CPP is achievable and a win-win for the economy and public health. There are serious public health problems. For example, Richmond has been cited as the number one city for problems with asthma. A strong plan can reduce pollution while creating good paying jobs in renewable energy. Ms. Lusby-Denham supports expanding renewable energy. The Mayor of Virginia Beach, Will Sessoms, said we cannot afford to do nothing and it is time to act. Hampton Roads is experiencing the highest level of sea level rise along the east coast, and is the second most vulnerable area in the United States to sea level rise. For these reasons Virginia needs to be a leader in clean energy, especially solar energy. Virginia lags behind other states in solar energy and

solar energy could create up to 14,000 jobs.

Commenter: Carolyn Reilly, Blue Ridge Environmental Defense League

Comments: Carolyn Reilly spoke on behalf of the Blue Ridge Environmental Defense League and as a resident of Franklin County. She supports the CPP but does not support the building block that calls for increasing the efficiency of existing coal fired power plants or the building block that calls for shifting more energy production to natural gas. She does support the building block that calls for more renewable energy like wind and solar. There are negative effects with natural gas and at each stage in the natural gas cycle there are emissions. Natural gas compressor stations and natural gas power plants also lead to health problems.

Commenter: Nan Gray

Comments: Nan Gray is a soil scientist. People cannot grow anything on soil that has been dug up and destroyed. Fracking fluid contains salt, which is toxic, and soils with a high salt content cannot be used to grow crops. Soil is a carbon sink, disturbing soil to build natural gas pipelines will release carbon, and the replaced soil will not function properly as a unit with a ten foot deep wall running underground. When it comes to the CPP anything other than fracking should be considered. If the pipeline has to be built – and no pipeline has to be built – DEQ already takes care of erosion and sediment control and stormwater but the philosophy of the erosion control must shift because the pipeline is a continuous trench. The pipeline should not be built and the CPP should take soil erosion into consideration.

Commenter: Edna Whitter

Comments: Edna Whitter is from Floyd County and is concerned because much of southwest Virginia is the headwaters for other areas. Floyd County has no reservoirs of water, it is dependent on rainwater. She is concerned that the natural gas pipelines coming through will disrupt these headwaters. Ms. Whitter is also concerned about mountaintop removal. In 2009 40% of Wise County was affected by mountaintop removal. Mountaintop removal affects the air and drinking water. She is also concerned because she is an Appalachian Power customer and she understands that Appalachian Power is going to charge consumers to install solar panels and will not fully compensate customers who generate solar power. If we are going to be looking at solar power we need to be looking at advantages to the consumer.

Commenter: Jonas Reilly

Comments: Jonas Reilly opposes the Mountain Valley Pipeline, which is going to come through the farm he lives on. The pipeline will make the farm less profitable, decrease the property value, and will damage the environment.

Commenter: Adam Cohen

Comments: Adam Cohen has been a designer, architect, and builder for 30 years in Virginia. Virginia is a little behind in stormwater, but is moving forward and Mr. Cohen

supports those efforts. Mr. Cohen has been involved in low energy building and solar energy for over 30 years. He has watched Virginia fall behind other states because of Virginia's unwillingness to buck the two largest electric power companies. His current work is not in Virginia, he consults internationally, and he is involved in building projects up to 300,000 square feet which use 50 to 70% less energy and is doing this at the cost of standard construction. Mr. Cohen has created a product that makes this easy to do, and he is working with a manufacturer that plans to open four product lines. When the manufacturer was looking for a location for its mid-Atlantic production line, Virginia was removed from the list immediately because of its lack of support for energy efficiency and renewable energy. The president of the manufacturing company told Mr. Cohen that Virginia was a state with no vision and is stuck in the old paradigm. Virginia is missing opportunities that are being handed to other states.

Commenter: Mark Laity-Snyder

Comments: Mark Laity-Snyder supports the CPP because as a country and a state we cannot transition to energy efficiency and renewable energy fast enough. He does not support natural gas because methane is 84 times more potent than CO₂ in the atmosphere as a greenhouse gas. We need to start by cutting back on the energy we use; the state can incentivize energy efficiency and save the 30% required by the CPP just through energy efficiency alone. In his work as a building commissioning professional he has seen instances where a building is heating and cooling simultaneously, which is extremely wasteful. A hot water valve can get stuck open, and the chilled water valve has to work that much harder to get to the set point. Another way to save energy is to adjust the schedules on the air handlers. There is no need to heat the building in the middle of the night if the building is unoccupied. Buildings can also be made more energy efficient through insulation and sealing the building envelope to the point where very little energy is used. Mr. Laity-Snyder's sister is building a zero energy home in Michigan. He was helping her build it in December and her strip heaters were set to 55 degrees, it was 10 to 20 degrees outside, but it was 70 degrees inside and she did not even have her doors sealed properly yet. The way to create jobs is not through methane production and fracking, but insulating and sealing our buildings and making them smarter in the way that they use their energy. Virginia should prioritize energy efficiency above all else. Then Virginia can reduce carbon pollution by prioritizing zero emission renewable energy such as solar and wind. Solar will soon become cheaper than natural gas, and will create more jobs than natural gas. Virginia's plan must promote long term health and the economic well-being of all Virginians, as well as those in West Virginia where the fracking is happening. Projects like the Mountain Valley Pipeline should not go through because they will create more demand for fracking in West Virginia where lives are being ruined by wells allowing methane to leak out.

Commenter: Monica Rokicki

Comments: Monica Rokicki started her own company, Better Building Works, which concentrates on building performance, and in particular energy efficiency and design

services. Better Building Works uses a whole building approach, and so far after completing over 100 projects has averaged a 34% energy efficiency gain and a 20% return on investment. The clean energy plan needs to use a whole economy approach, including people and their behaviors, buildings (which use 70% of the electricity and 40% of the total energy in the country), lifestyles, dreams, and a vision. That vision must include not only Virginia's traditions but a way to make Virginia a fabulous state for our children and the future, and incorporate the new knowledge we are getting. If we do not do this Virginia is going to stagnate.

Commenter: Roberta Bondurant

Comments: Roberta Bondurant lives in Bent Mountain and said that the CPP is an opportunity for Virginia. She seconded the previous comments expressing concerns about natural gas and also supports energy efficiency and opportunities for solar energy. Ms. Bondurant is especially concerned about natural gas pipelines, especially related to erosion and sediment control in places like Bent Mountain, which sits at the top of the watershed. Many local counties have adopted resolutions on erosion and sediment control. One concern is that localities may not have the power to regulate erosion and sediment control with regards to natural gas pipelines. But DEQ has the power and authority to regulate erosion and sediment. She has read in the media that DEQ does not have the resources in terms of manpower and money to do this. Earlier tonight the Roanoke County Board of Supervisors adopted a resolution asking Governor McAuliffe to: 1) make sure that DEQ requires project specific erosion, sediment, and stormwater controls, 2) that these plans be made available to the county and public for review and comment before construction, 3) that prior to construction DEQ require Mountain Valley Pipeline LLC officials and third party inspectors to meet with local officials to discuss the implementation of the project specific erosion, sediment, and stormwater management, and 4) ensure that DEQ has proper resources.

Commenter: David Denham

Comments: David Denham with Represent.US is a retired United Church of Christ minister and said that one of the struggles with the CPP is our thinking process. Mr. Denham said he was reminded of his spiritual advisor 30 years ago, who told him he was going to help him think theologically, and asked us to think like God about the CPP. Mountains need to be preserved, clean water should flow freely, light and wind should be used for energy, and the Golden Rule must be followed. Those making the decisions should pray, envision those near and dear to them, and to ask if the CPP in any way impedes them. If it does, then the plan needs to be adjusted.

Commenter: Jack Wall, Floyd Eco Village

Comments: Jack Wall said that Floyd Eco Village is committed to demonstrating that there are readily available solutions for cutting out energy. Their goal is zero energy housing. Most of their housing is powered by solar and they use a lot of insulation and energy efficiency measures. Climate change is not a debate, it is completely formed science. There are a lot of entrenched industry interests that are making money on

unearthing 500 million year old solar energy sources stored in the ground like oil, gas, and coal, and the environmental movement is a direct threat to their profits. We know what the right side of the issue is here, and all of the technology is there. The CPP will not harm the economy. In Floyd it is vital that we convert to a low energy economy. There is a lot of old housing that is not constructed properly to reduce energy bills. We could use a carbon tax and use that money to retrofit homes and increase technology, which would create jobs. People need zero energy homes, but because of income inequality they cannot afford to do it on their own. There is plenty of wealth in the country though, and a carbon tax could take some of that money and use it for energy efficiency. This would also meet the federal mandates, which are doable and would be of great benefit to our economy.

Commenter: Irene Leech, Virginia Citizens Consumer Council

Comments: Irene Leech supports energy efficiency, particularly things that can cut energy bills. So far Virginia has done very little, there is a voluntary standard and utilities have opposed a mandatory standard. In the summer, before the final rule came out, Public Citizen did a study based on the proposed rule and determined that it could cut energy bills by 7.7 to 8.47% by 2030. When the rule came out it gave Virginia even more space to accomplish things. Ms. Leech encourages Virginia to take advantage of this great opportunity. Governor McAuliffe supports the CPP and she hopes that this will allow Virginia to finally do some things the Virginia Citizens Consumer Council has supported on energy.

Commenter: Bill Van Velzer

Comments: Bill Van Velzer is opposed to industrial scale wind turbines. Mr. Van Velzer is not opposed to sustainable energy and clean energy, he supports no energy and low energy housing and commercial construction. There is more energy to be conserved than can be produced by wind turbines. Mr. Van Velzer is opposing the wind turbine ordinance in Botetourt County. DEQ's model wind ordinance, page 9, footnote 19, speaks to the responsibility of localities to keep up with the latest developments in research and monitoring of the environmental impacts of wind turbines. One of those impacts is infrasound. DEQ's model wind ordinance came out based on 2010 research. In the intervening five years there has been significant research on infrasound. Many countries in Europe strictly regulate wind turbines and impose decibel limits that are stricter than those in DEQ's model wind ordinance. Mr. Van Velzer is concerned about the effects of infrasound, which his parents have experienced in California. Wind turbines have damaged the value of his parents' property in California, and this taking of the value of one's property is another issue with wind turbines. DEQ should put the requirement that localities keep up with recent developments in standards and discovery into the body of the model ordinance rather than in a footnote.

Commenter: Jonathan Young

Comments: Jonathan Young lives in Botetourt County and works for a solar company. He previously worked in Ohio, which had incentives for solar. Those incentives allowed

the company he worked for in Ohio to grow and prosper. Virginia is in a position to lead the charge and experience the benefits. There has been tremendous economic growth and job growth in solar, which is a very young industry. States that adopt renewable friendly policies experience growth in those industries, and Virginia should be more aggressive with the CPP. We need a better balance than fossil fuels generating most of the energy with renewable energy being just a small portion of the energy generated. Some energy sources may appear cheaper up front, but the long term costs, such as long term environmental costs, also need to be considered. When those costs are considered, renewable energy has a stronger case. When we look at the environmental impact and the economic impact we can do better with the CPP. He also wants Virginia to adopt a Renewable Portfolio Standard (RPS).

Commenter: [No name given on the tape, from the sign-in sheet it appears to be Robert Crawford]

Comments: We can and must act to moderate the speed and severity of climate change. This requires severely reducing the release of new emissions, but presently the amount of CO₂ in the atmosphere is increasing at an accelerated rate. Methane, a stronger greenhouse gas than CO₂, is also being released due to fracking and this adds to the urgency of the global warming threat. We must halt further greenhouse gas emissions. If we cannot halt them we must exert every effort to reduce them as quickly as possible. The way to do this is not through a market process of buying and selling permission to continue polluting, but by the process of changing our energy production from fossil fuels to renewables such as solar, wind, geothermal, and hydro. Of these, rooftop solar may offer the greatest potential for fast deployment. However, Appalachian Power's proposed program of terms for residential solar installations makes solar installations infeasible for residential owners.

Commenter: Jason Lambert

Comments: Jason Lambert strongly believes in investing in and expanding clean renewable energy. Whatever it takes to cut carbon pollution and greenhouse gases should be the top priority right now. Mr. Lambert is an organizer with 15 Now Roanoke, a living wage campaign, and paying people enough to live on is another high priority, but the environment needs to be the highest priority. He strongly supports investing in renewable energy, and possibly even making power utilities and water utilities publicly owned utilities so they are not for profit. A lot of countries are getting their energy from renewable clean energy and there is no reason why we cannot do the same. There are a lot of natural gas pipelines being proposed, and they have no public benefit and add negatives.

Commenter: Jim Best, Floyd Friends Meeting

Comments: Jim Best came to be a spokesman for the Floyd Friends Meeting, a small Quaker meeting. They are distressed that by participating in the purchase of coal generated electricity they are contributing to the problem rather than the solution of improving the environment. Mr. Best has tried to find where they can purchase

renewable energy credits. There are many places in other states that provide them. Appalachian Power does not provide them but renewable energy credits are one way to be a part of the solution. Mr. Best understands that at one time there was a bill in Virginia to support public 501(c) groups, particularly churches, to use solar energy, which was defeated. This is one thing that would be helpful.

September 28, 2015

Fairfax County South County High School, Lorton, Virginia

Commenter: Tim Stevens

Comments: Mr. Stevens lives in Falls Church. The CPP is in response to greenhouse gases that are disrupting the planet. The problems will worsen as long as GHG emissions continue. State government should keep in mind the objective of eliminating GHG emissions, not gaming the plan so that we can get by with the minimum. The plan should engage local jurisdictions in the effort to reduce GHG emissions.

Commenter: Ivy Main, Sierra Club

Comments: Virginia should adopt a CPP compliance approach that is mass-based and includes new sources of CO₂ emissions.

Commenter: Linda Burchfiel

Comments: Virginia is already suffering from climate change, and it can be seen most vividly on the coast. We must look to the CPP for guidance on cost-effective energy efficiency strategies, and use the Clean Energy Incentive Program to get credit for early investment in demand-side energy efficiency projects. Solar, wind and geothermal generation must be part of our plan. Consider a cap and trade model that would cap both existing and new power plants, so that pollution won't rise in the future.

Commenter: Eileen Levandoski, Sierra Club

Comments: A plan with an overreliance on natural gas is short-sighted. Natural gas is a fossil fuel that produces carbon emissions, has other issues throughout its lifecycle, and delays full deployment of renewables. The Virginia CPP should meet its very modest reduction levels and also get on the path for 100% clean power generation by 2050.

Commenter: Earle Mitchell, Sierra Club

Comments: Mr. Mitchell lives in Springfield and discussed water quality issues. Virginia should consider joining RGGI. Adopting clean energy sources would improve the health of our citizens and would create many nonpolluting good jobs in our state.

Commenter: Seth Heald

Comments: Take into consideration "Virginia Climate Fever," by Steve Nash. There will be harmful effects in addition to sea level rise in coastal areas. The CPP is only the beginning, so new natural gas or other fossil fuel infrastructure makes no sense at this point. We need to focus on clean energy and encourage energy efficiency.

Commenter: Jennifer Kaufer, American Lung Association

Comments: There is a strong connection between protecting air quality and protecting the health of the public. We have an obligation to take preventative action when the opportunity presents itself. The CPP is such an opportunity, and will benefit not only asthma sufferers, but children, the elderly, and those with other chronic illnesses. Carbon pollution leads to warmer temperatures that can enhance the conditions for lethal air pollutants, including ozone and particulate. A strong CPP will also have benefits for Virginia families. For every dollar we invest in the CPP, American families will see up to \$4 in health benefits totaling up to a potential \$54 billion. ALA urges that public health be at the forefront of the CPP.

Commenter: Barklie Estes

Comments: The goals for the carbon reduction don't seem to include a power plant that was added during the baseline year in Virginia City. The requirements placed on Virginia seem overly stringent. This is a burden on the poorer citizens in the western part of the state.

Commenter: Larry Baldwin

Comments: CO₂ has played a major role in earth's energy system balance. To assume that you can remove CO₂ by turning your thermostat down is nonsense. CO₂ can be removed from smokestacks; there is an effective fuel cell technology newly available.

Commenter: Reverend Jean Wright, Faith Alliance for Climate Solutions

Comments: There are tools and technologies available to quickly and inexpensively begin reducing human caused carbon pollution. There is a large, diverse menu of possibilities and options in meeting the EPA CPP requirements directly and indirectly.

Commenter: Barbara Bacon, Mount Vernon Unitarian Church

Comments: The Unitarian Universalist Association adopted an Action of Immediate Witness calling upon nearly 200,000 UUs across the country to act for a livable climate. The CPP sets minimum requirements for Virginia to reduce emissions from dirty power plants. We challenge Virginia to create policies that reduce emissions, increase energy efficiency, assist communities affected by sea level rise, and encourage the development of renewable sources of energy. We encourage DEQ to have Virginia join RGGI. If Virginia is to attract such businesses in the future, it must build the renewable infrastructure that will allow companies to meet these commitments.

Commenter: Walton Shepherd, Natural Resources Defense Council

Comments: The state plan must both deliver net carbon pollution reductions, rather than allow carbon pollution from the power sector to continue to rise; and promote the long-term health and economic well-being of all Virginians, including those in economically-disadvantaged communities. To meet these goals, the state plan should be mass-based, cover new and existing sources and allow trading among generators.

The plan must cover new and existing sources. The plan should also allow for pollution allowance trading with other states, while evaluating and avoiding environmental justice impacts. The best option to maximize benefits for Virginia is through open auction of 100% of mass-based allowances. Lastly, the state plan should not provide a windfall to the most-polluting sources.

Commenter: Diana Johnson

Comments: Virginia is behind the curve when it comes to renewable energy and energy efficiency. The best way to create clean power and the associated jobs that Virginia lacks, is to create energy efficiency and solar financing options for homes and businesses, jump-start renewable energy projects by adopting aggressive state targets and removing policy barriers that are holding the market back, and address carbon pollution emissions from both new and existing power plants.

Commenter: Mike Ewall, Energy Justice Network

Comments: There is a need to address environmental justice in low-income communities and communities of color. A cap-and-trade approach such as RGGI is not appropriate. The Clean Air Act does not allow trading to meet compliance, and the EJ community is strongly opposed to trading as a mechanism because it creates hotspots. It is important that incineration, landfills, biomass, and natural gas should not be considered as a CPP control options.

Commenter: Linda Muller

Comments: Ms. Muller lives in Stafford County. Fossil fuel plants threaten public health. Embracing a robust Virginia solar and wind energy grid is an opportunity for the state. Reducing greenhouse gas emissions is essential for controlling rising coastal tides.

Commenter: Bill Johnson

Comments: Mr. Johnson lives in Fredericksburg. The state CPP is an opportunity to reduce carbon pollution from coal and gas power plants, while staying away from nuclear. Relying on fracking removes fossil fuels from under the ground and increases the amounts of CO₂ and methane released into the atmosphere. Reducing coal usage is a step in the right direction. Wasting infrastructure spending on gas pipelines will tie up money that should be spent on solar and wind energy, and will lock us into energy sources that increase greenhouse gas emissions when there are other viable, non-emitting sources today. Virginia must adopt a compliance plan that counts new sources, under a mass-based plan, and which doesn't allow Virginia to become a guinea pig for an untried nuclear technology. Solar and wind must become the primary source and we need to move there now.

Commenter: Mary Jane Reyes

Comments: Burning biomass is not clean power. Refuse derived fuel pellets are not clean power. Municipal solid waste to energy is not clean power. Lorton, Virginia is a culturally diverse community suffering a disproportionate negative public health and

environmental impacts due to massive trash burning, sewage treatment, and landfills sited without adequate buffering of residential areas.

Commenter: Dick Kennedy

Comments: CO₂ emissions are an externality--they impose costs on society that are not included in the prices of products, so even conservative economists would agree that the free market needs help. The best remedy would be an internationally-agreed carbon tax, because that would minimize government's role, leaving it up to the private sector to find the most cost-effective way of reducing CO₂ emissions, but that clearly isn't in the cards now. Second-best actions are better than nothing, however, and joining RGGI would be a good start, although it is not enough.

Commenter: Joseph Eaves, National Electrical Manufacturers Association

Comments: NEMA believes that energy efficiency policies, for the residential, commercial, industrial, and transmission sectors, should be an important component to Virginia's state plan. Recent advances in commercial building equipment now make it possible to achieve a significant reduction in buildings' energy consumption. Just as with commercial buildings, residential homes are getting smarter and more efficient. The industrial and manufacturing sectors benefit from energy efficiency as well. These savings result in more efficient productivity, less cost per unit produced, and lower prices to consumers, all of which improve international competitiveness and lower emissions nationwide. Finally, the electric grid itself can be modernized to operate more efficiently. NEMA encourages Virginia to include aggressive energy efficiency measures as part of the state plan.

Commenter: Dan Snider, The Green Suits LLC

Comments: Adoption of the CPP will create thousands of high paying and stable jobs throughout the Commonwealth. Northern Virginia has one of the highest concentrations of high-tech talent in the nation professionals who are eager to go into fields that will lead our economy's growth. Second, we have the best education and training resources in the nation. Third, as Virginia ranks highest among states to do business, we are well positioned to make sure clean energy jobs created here stay here. Fourth, our talent want the high paying and stable jobs that investment in the CPP will bring.

Commenter: Tiziana Bottin, Union of Concerned Scientists

Comments: We need to end our reliance on fossil fuels and develop alternative sources of energy. The vital solution to not only slow down global warming but to actually reverse it, is to put the CO₂ in the atmosphere back where it belongs: in the soil. Maximizing soil stability is one way power plants could offset their emissions. Soil carbon restoration could be especially useful if Virginia joins a cap and trade system, and we could lead the way for other states to limit and trade carbon credits through agricultural methods.

Commenter: Mona Sheth, Delivered Energy Efficiency Coalition (TPDEE)

Comments: Including TPDEE in Virginia compliance plans will lower costs for state ratepayers, increase industrial competitiveness, and create jobs across multiple sectors. TPDEE can rightly be viewed as baseload power, similar to natural gas and coal, or as a carbon-free way to meet energy demand akin to wind and solar generation. TPDEE can operate effectively in any CPP pathway. Efficiency measures have the potential to revitalize Virginia's industrial base by modernizing and upgrading industrial facilities, which will enhance the state's overall competitiveness. TPDEE creates jobs across the manufacturing, construction, engineering, financial, technological, environmental, and energy supply chains.

Commenter: Ida Shiang, Energy Recovery Council (ERC)

Comments: There is a tremendous opportunity to benefit from reduced greenhouse gases made possible by Virginia's past and future investment in waste-to-energy facilities. The climate benefits of WTE technology are well-documented. WTE is baseload power. WTE is compatible with recycling. WTE has a very positive economic impact on communities. ERC urges Virginia to develop a state plan under the CPP that reinforces the solid waste hierarchy and supports the investment that local governments have made in waste-to-energy.

Commenter: Jean Borchert

Comments: Mr. Borchert is a student at GMU and studies the relationship between income and carbon emissions. Individuals cannot effectively reduce personal carbon emissions. We need institutions, and economic incentives and constraints, to reduce carbon by any means we can.

Commenter: Russ Hopler

Comments: • Count all carbon pollution emissions from new and existing sources of electricity. Cap that amount and work to reduce the total pollution emissions-this creates a marketplace of valuable carbon allowances.

• Develop a voluntary mechanism for the trading of these carbon allowances either within the state or across state lines. This creates monetary value in pollution reductions-therby further encouraging more carbon pollution reductions via energy efficiency and renewable energy.

• Ensure that the value of any of these allowances benefits the people of Virginia by reducing energy bills and re-investing in projects that further reduce the impacts of climate change (i.e., adaptation, mitigation, energy efficiency, etc.). The value of these allowances should not be given to the utilities as profit margin.

Commenter: Chris Casey

Comments: We have learned that polluting power plants contribute greatly to our warming climate, which in turn negatively impacts us all. These impacts include asthma and other lung conditions suffered by many Virginians, negative impacts on the habitats and health of Virginia wildlife, and negative impacts on our economy. I ask that as you plan for the future, you consider these lessons from our dirty energy past, and plan for a

clean energy future. Virginia has the resources and the skills necessary to be a leader in the development of clean energy.

Commenter: Glenda Booth, Audubon Society of Northern Virginia

Comments: Our members are very concerned about climate change. Last year, the national Audubon Society issued a study which found that half of North America's bird species would be adversely impacted by climate change. Birds need a healthy habitat and biodiversity. We need to consider the recommendations of the Virginia Climate Commission, which recognizes the impact of climate change on ecosystems. We need to expand renewables, and protect natural resources that sequester carbon.

Commenter: Natalie Pien

Comments: Ms. Pien lives in Loudoun. She urges implementation of the CPP without delay or dilution; the CPP goals must be surpassed without reliance on natural gas. Pollution from burning fossil fuels creates a health hazard, and climate change has caused an increase in asthma attacks. The siting of power plants and pipelines creates a disproportionate adverse health impact on disadvantaged communities. Sea level rise will have adverse impacts on coastal Virginia. New clean energy technologies will have beneficial economic impacts. RGGI is effective, and Virginia should participate. A cap and trade program must be mass-based.

Commenter: William Loman, Sustainable Loudoun

Comments: Mr. Loman is from Sterling. The state plan must lower carbon emissions and generate much-needed resources for Virginia communities on the front lines of climate change, while avoiding overreliance on natural gas. The most important step that DEQ can take is to take steps for Virginia to join RGGI. The CPP sets a minimum floor for action on climate change. We must do much more than the minimum.

Commenter: Richard Ball

Comments: Virginia power producers are headed toward dependence on natural gas, which is very risky. The plan should emphasize clean energy sources such as solar, wind and energy efficiency. A critical CPP option is to adopt a mass basis and include new sources, as well as including allowance set-asides that foster clean energy. The state plan could include a mass-based system that includes new sources of CO₂ as well as existing sources. It is important that Virginia discourage dependence on natural gas.

Commenter: Nils Bjork

Comments: Mr. Bjork lives in Fairfax County. This is a discussion on climate change, but he wanted to share a recent study that predicts a civilization crash not as a result of climate change but due to the fact that economically retrievable oil will soon run out.

Commenter: Ana Prados

Comments: Ms. Prados lives in Springfield. Overall the CPP is very modest compared to what we actually need. Virginia's goals should not be difficult to attain. Do not seek

compliance by out-of-state trading; in-state trading would be keep the benefits in Virginia. There would be related air quality benefits from reduction of other pollutants. The most effective tools are energy efficiency and renewables.

Commenter: Derek Meyer

Comments: Mr. Meyer lives in Alexandria. The CPP is a vital first step. In terms of impact, beyond disadvantaged communities and the military, we need to consider the impact to historic sites such as Jamestown, Richmond, and Alexandria. The impacts on health are also tremendous. We can achieve a significant part of our energy needs through renewables and energy efficiency. Virginia should join RGGI and encourage the development of off-shore wind.

Commenter: Cynthia Adams, Virginia Energy Efficiency Council (VAEEC)

Comments: Energy efficiency should have a central role in Virginia's CPP. Energy efficiency is one of the primary tools available to states to meet their targets, and, from a performance perspective, can be counted on to reduce carbon emissions. It is a low-cost option, and saves consumers money. It is one of the cleanest options, as it reduces other pollutants in addition to carbon. It is one of the safest, most reliable options. Energy efficiency also promotes local economic development and job creation.

Commenter: Jalonnie White-Newsome

Comments: There are 3 considerations that ought to be taken into account as the planning process moves ahead:

- Meaningful Engagement: It is important that this public hearing is not a one-off but the beginning of numerous opportunities to play an active role in the planning.
- Building on the EPA EJ Proximity Analysis: Regardless of the options you choose, I hope that state will systematically consider how these options will impact, directly or indirectly, overly burdened communities. Please explicitly expand on the EJ Proximity analysis to ensure that Virginia's particular policy prescription will benefit everyone.
- Creating an Environmental Justice Advisory Team for the entire process: Setting up a specific "team/table" for EJ advocates for the state would be a great next step to insure we are at the table.

Commenter: Arielle Newsome

Comments: The most important reason to support Barak Obama's CPP is because we all want to live a clean and healthy lives. I believe in environmental justice and that everybody should breathe cleaner air.

September 30, 2015

Henrico County Government Center, Henrico, Virginia

Commenter: David Hudgins, ODEC

Comments: The Clean Power Plan (CPP) will be costly, and rural residents who are primarily served by the COOPs can't afford to implement it.

Commenter: Sam Brumberg, Association of Electric Cooperatives
Comments: In rural areas, electric cooperative members are responsible for paying for this change, and they should not be forced to choose between heating/cooling their home and buying medication or groceries.

Commenter: Jeremy Richardson, Union of Concerned Scientists
Comments: We support the CPP and do not view the use of renewable energy as an either/or proposition. VA should be looking hard at ways to invest in energy efficiency.

Commenter: Lisa Jacobson, Business Council for Sustainable Environment
Comments: CPP offers great opportunities for partnership between policy makers and business partners. VA should consider participation in the clean energy incentive program. VA should adopt a trade ready approach and consider market based incentives to assure compliance. VA should consider the full portfolio of energy technologies.

Commenter: Karl Bren
Comments: We have got to stop drilling, stop mountaintop removal, move toward all renewable energy. Burning coal is dirty. We don't need to invent new technologies, these technologies are available today. Improve energy efficiency.

Commenter: Daryl Downing
Comments: Need to significantly reduce emissions of GHG, Hg, coal ash and particulate matter, as well as stop mountaintop removal mining. Every aspect of coal combustion is hazardous to health. I support the CPP.

Commenter: Damian Pitt
Comments: I support the CPP. We need to be aware of potential cost increases, but we shouldn't continue down the path of dependency on fossil fuels. Increasing solar utilization by a small amount would only increase the cost of power marginally.

Commenter: Shana Moore, VCU student
Comments: We should replace existing retired fossil fuel plants with alternative energy facilities. We need to incentivize alternative energy and make use of multi-state partnerships to develop alternative energy facilities rather than build more natural gas facilities.

Commenter: Rain Burroughs
Comments: We need to encourage everyone to increase energy efficiency in their homes and help our neighbors.

Commenter: Pam Dummitt, Richmond Audubon Society
Comments: Warming trends created by carbon pollution are a threat to birds, causing migration patterns to shift northward. We support clean/renewable energy, provided they are designed to minimize impact on bird migration.

Commenter: Robert Walters, 350 CVA
Comments: I support the CPP. VA needs to be building renewable energy facilities to replace fossil fuel facilities.

Commenter: Elizabeth Williams, 350
Comments: The CPP is an important step to turn around the dismal predictions of global warming. I support green energy.

Commenter: Lindsey Stone
Comments: I support the CPP. I want to stop carbon pollution at its source.

Commenter: Scott Jordan
Comments: I support the CPP.

Commenter: Erica Gray, Sierra Club
Comments: Nuclear power is not the answer – it's expensive, it's dangerous, and it's dirty. We should use the money toward renewable energy instead of investing in nuclear.

Commenter: Anne Uyeda
Comments: Support reducing emissions by using landfill waste, reusing old materials rather than buying new, and promoting sustainable bio-based options. Good options: cogeneration, and combined heat and power.

Commenter: Andrew Grigsby, LEAP, VAEEC
Comments: I support the CPP. There are lots of technologies out there that will allow us to live more efficiently.

Commenter: Quan Williams, New Virginia Majority
Comments: Minorities are disproportionately impacted by their close proximity to power plants. CPP is a win for all communities. I encourage VA to develop a plan that benefits everyone. I support an environmental justice advisory team.

Commenter: Kendyl Crawford, Sierra Club
Comments: I am concerned about climate disruption and the threat of rapid sea level rise. I strongly encourage the reduction of GHG.

Commenter: Lee Williams
Comments: I support the CPP. Gas pipelines and new gas power plants are the wrong choice for VA. Solar and wind are the right way to go.

Commenter: Tariq Abdul-Akbor, Sierra Club
Comments: We need to invest our resources in clean air.

Commenter: William Nelson, Citizens Climate Lobby
Comments: I encourage VA to take the most aggressive approach to reducing GHG emissions to keep the cost of energy affordable for future generations.

Commenter: Tyla Matteson
Comments: Need to draft a VA plan that is fair and efficient which makes full use of solar and wind technologies.

Commenter: Amy Pietl, Sierra Club
Comments: I support a plan that creates more clean power focusing on efficiency. We need to ensure that the plan benefits the people by reducing energy bills and reinvesting in projects that reduce the impact of climate change, creating healthier air and a cleaner environment.

Commenter: Mary Finley-Brook, University of Richmond
Comments: We need to significantly limit carbon pollution. We must be more ambitious than to simply offer a plan that comes in at the minimum levels of reductions. We cannot invest in new fossil fuel infrastructure, and we should phase out all fossil fuel use as quickly as possible. We should immediately implement energy efficiency and conservation. We should invest in clean energy which brings job growth and improved health.

Commenter: Isabella Pezzulo, University of Richmond
Comments: I support the CPP. I am concerned about coastal communities affected by sea level rise and am concerned about mountaintop mining.

Commenter: Steven Heinitz
Comments: I support the CPP. We need to use common sense approaches. I support renewable energy approaches over natural gas and nuclear.

Commenter: Carey Whitehead
Comments: Significant reductions in CO₂ emissions are necessary. We should reduce carbon pollution while promoting long-term resilience of our energy system. We should focus on zero emission transmission systems and return cost savings to consumers.

- Commenter: Jon Baker, VCU
Comments: Climate change is real. Oceans are rising. The price of solar is falling. The Toyota Prius is a gas guzzler. I drive a Chevy volt and it doesn't use a drop of gas.
- Commenter: Marie Stella
Comments: It boils down to 3 things: Health, Environment and Economics. Asthma is like a national epidemic, and many people don't have health care. We must change before half the country is under water.
- Commenter: Aaron Sutch, VA SUN
Comments: I support the CPP. We should consider solar distributed generation. This reduces our reliance on fossil fuels. Solar has a limitless source of fuel and lasts 30 years.
- Commenter: John Wray, Jr.
Comments: It is warmer now than it used to be, but 100 degree days existed years ago. There will always be climate change. I live in a very efficient home with 2 sets of solar panels in my yard in Henrico that are guaranteed to last 25 years. But solar power will not run at night or on cloudy days. We need power plants to provide power during these times.
- Commenter: Bud Vye, VA Bicycling Federation
Comments: I support the CPP.
- Commenter: Ron Skinner
Comments: Years of burning fossil fuels has resulted in push back from the environment. We need to get off of the short term quick and dirty fix and make a big difference.

October 1, 2015

Mountain Empire Community College, Big Stone Gap, Virginia

Commenter: Chris Sturgill, Consol Energy
Comments: Virginia should reject the. It will have little effect on climate change--it will reduce atmospheric CO2 concentrations by less than 1/2 of 1%, while having minimal impacts on temperature or sea level rise. The nation's coal fleet is a primary electricity provider. It accounts for less than 3% of global greenhouse gas emissions, yet provides nearly 40% of our nation's electricity. America's power grid is not prepared to operate on less reliable renewable fuel sources. EPA's claims about air pollution benefits is designed to hide the fact that the carbon rule will not do anything to improve climate change and the purpose of bringing health to the discussion is to distract consumers from the truth about rising energy costs and threats to power reliability. We can cleanly and efficiently use all of our affordable, reliable and abundant fuel sources including

coal while pursuing sensible environmental policies. Virginia should initiate an "all of the above" energy strategy that recognizes the value of coal in the way of jobs, taxes, and as a source of reliable electricity.

Commenter: Roger Jones

Comments: Mr. Jones is concerned with EPA's plan. It is far-fetched, yet the environmental people push for more and more when you can only get very minor reductions. Higher electricity prices harm lower income households by increasing the cost of basic needs. Coal provides clean energy and brought us prosperity and good health care. Coal provides jobs but the jobs can be lost by unreasonable standards. The industry will need to invest \$142 billion to clean the air with an 11% electricity cost increase. Virginia should join other states in the lawsuit challenging the plan.

Commenter: Jane Branham

Comments: Ms. Branham is a resident of Wise County, which is among the poorest counties in the state with the some of the worst health care access in the state. She supports initiatives for clean air, and wants Virginia to be a leader in following the CPP. Virginia is 80% of the way toward meeting the CPP goals, and 20% should be for energy efficiency and renewables. Southwest Virginia needs jobs and industry but can't rely on coal.

Commenter: Cathy St. Clair, Consol Energy

Comments: Virginia should reject the CPP, and participate in legal action against it. Buchanan County has a high unemployment rate and has been hard hit by coal closures. Affordable and reliable energy is key to Virginia and the United States. The plan will create high energy costs and hurt reliability, with only meaningless climate benefits. There will be an impact on consumers, including low-income households and people on a fixed income. 20% of the U.S. coal fleet is retiring due to EPA policies. Once coal plants retire, they cannot be brought back. Affordable, reliable energy is the cornerstone of growth and resilience in any community. Virginia should reject the CPP and participate in legal challenges.

Commenter: Willy Dodson

Comments: Mr. Dodson lives in Appalachia. Fossil fuels are finite. Controlling the environmental and health impacts from fossil fuel is also limited--there is only so much we can do. We have a choice between suing the federal government or trying to make progress and changes to energy markets and infrastructure that are going to happen anyway. Upgrading to a clean energy infrastructure will create opportunities for jobs, particularly in southwest Virginia.

Commenter: Edward Claggert, ATS

Comments: The CPP will be highly detrimental to Virginia's economy with no direct health benefits. It will kill all coal plants and force retrofitting on most natural gas plants, yielding an 11-16% increase in power costs. 30% of our power is imported from other

states, including coal-producing states--when they must increase costs, our costs will also increase. Wind will not produce enough energy even though it costs three times as much as coal. 2012 was a poor choice of dates for basing the Virginia standard. There will also be an impact on the coal ports with job loss. DEQ develop a contingency plan but participate in legal challenges to the CPP.

Commenter: Gerald Collins, Coal Mining Engineering Services

Comments: Mr. Collins is from Wise County. He urged Virginia to reject the CPP and join the state lawsuits against EPA. There will be a \$41 billion cost per year to businesses and consumers. It would close down an additional 45,000 MW of electricity generated from coal. It's not hard to see the loss of jobs in the coal mining industry in this part of Virginia. The average electricity price increase per year from 2020-2029 would be 13-16% per year. This would be devastating to the low- and middle-income residents of this county.

Commenter: Bruce Burcat, Mid-Atlantic Renewable Energy Coalition

Comments: MARAC is a non-profit organization to support renewable technologies. Wind is one of the ways to meet the CPP and is a cost-effective means of compliance. It would create jobs while being a zero-emitting process. Virginia should consider renewable energy as part of its plan.

Commenter: Jason Sturgill, Edward Jones Investments

Comments: Further regulation will cause economic devastation in southwest Virginia and affect the nation's security. While renewables are welcome to southwest Virginia to create new opportunities for energy resources, we are also taking ourselves off of the energy market. No one nation can make an impact on greenhouse gases, and none of the major developing countries are slowing down their carbon emissions. Virginia should reject the EPA plan and join litigation.

Commenter: Harry Childress, Virginia Coal and Energy Alliance

Comments: Coal is important to Virginia, with an estimated value of \$1.9 billion in 2013 and accounts for more than 5% of Virginia's work force. The CPP is the most over-reaching and expensive rule ever imposed on the electric power sector, potentially leading to \$366 billion in compliance costs. It is legally flawed, will create skyrocketing energy costs, and will reduce grid reliability, all for negligible climate benefits. The coal fleet is responsible for 3% of global greenhouse gas emissions, yet provides 40% of the nation's electricity. Wind, nuclear, and solar power could not realistically replace the amount of coal needed to maintain electrical production even with conservation. People will be paying more to consume less energy. Virginia should either not submit a plan or request the 2-year extension.

Commenter: David Cox, Wise County

Comments: Mr. Cox is the finance director for the county. Revenue from the Dominion coal plant pays the debt service for the county high schools--\$7.5 million in Wise

County and \$1 million in St. Paul. His concern is how the CPP will affect this power plant, which is one of the cleanest in the country. We need to count on all available technology, not just renewables. ODEC is proposing a 10.2% rate increase. There are a lot of people in the county on a fixed income--and social security is not increasing at a 10.2% rate. DEQ should look at the impacts on Wise County and the power plant.

Commenter: Diana Withen, Southern Appalachian Mountain Stewards

Comments: Change is hard--many counties depend on coal. We must change our economy. Virginia Tech says that there are only 20 years of coal left in southwest Virginia. Clean energy can create new jobs. Miners who are used to working with machinery could build turbines and install solar panels. It is embarrassing that Virginia has no real wind production. Solar creates cheap if not free energy. The CPP is about making an investment. The area needs to transition to clean energy.

Commenter: Donnie Rife, Dickenson County Board of Supervisors

Comments: Mr. Rife is the Chairman of the Dickenson County Board of Supervisors. Dickenson County is energy, and coal has always been king. We've got a state-of-the-art education facility, and now my biggest concern is whether we are going to be able to operate it. Rules and regulations are having a negative impact have on the coal industry and, in turn, the region and the community. Shutting down coal mines will only have a slight effect on carbon emissions. We don't oppose renewable resources, but coal is the only way to make a living in this region. Give clean coal technology an opportunity.

Commenter: Lawrence Moise, Buchanan County

Comments: Mr. Moise is the county attorney for Buchanan County. Renewables and fossil fuels are not mutually exclusive. The CPP will impose a cap-and-trade policy for carbon emissions which Congress has rejected. It interferes with the state's authority to regulate its own energy policy. Buchanan County is a vulnerable, overburdened community that will be impacted significantly. Tax revenues are down, population is in decline, there is a 10.8% unemployment rate and a large elderly and disabled population on fixed income. There has been a 30% jump in power rates, and the CPP will raise rates from 11-15%. The CPP represents an extremist ideology over people--we need to put people first. Virginia should pursue a state plan, not the EPA plan.

Commenter: Barbara Altizer, Virginia Coal and Energy Alliance

Comments: VCEA does support all forms of energy. The state should enter into the legal challenges against the CPP. Given that the litigation will likely succeed, Virginia should not commit to a plan but ask for the 2-year extension. The CPP is only a cap-and-trade program, because compliance is impossible without trading. Congress has already considered and rejected CO₂ trading. CPP is legally flawed; EPA is trying to impose a program that only Congress has the legal authority to adopt. The standard for existing sources cannot be met even by new sources. The plan intrudes on state energy authority, and violates the U.S. constitution. Virginia should adopt a wait-and-see approach. Despite the severe impacts of the CPP, EPA admits that reducing

greenhouse gases to zero would not create substantial climate change.

Commenter: Joe Street

Comments: There are benefits of a strong coal industry to the county and to the Commonwealth. EPA has been charged with an important task: protecting human health and the environment. But EPA pushes politically-driven rules. Buchanan County will suffer revenue loss, as industries will close due to the regulations. Thousands of coal miners have been laid off and there will be more to come; this will affect the local economy. We have tried to diversify but the lack of flat land makes it impossible, and the loss of coal will be devastating. It is unlikely that renewables would be reliable enough to generate enough electricity. Focus on clean coal technology is needed for grid reliability and is the most economical form of power generation. Renewables cannot make up the difference and are too costly.

Commenter: Shannon Scott, Wise County Administrator

Comments: The Dominion Power Plant in Virginia City is financially important to Wise County. It exemplifies clean air versus the communities that have been affected by attempts to clean the air up. EPA's goal was not to protect the environment but to eradicate mountaintop mining. Coal will always have a role in the generation of electricity. It is a shame that coal will not be coming from Appalachia and that jobs will be lost. Tax revenue is disappearing with a negative impact on the community. Wise County and the coal field counties are not going to have the same quality of life because of EPA rules. Existing power plants including Virginia City should be allowed to continue generating electricity.

October 6, 2015

Tidewater Community College, Portsmouth, Virginia

Commenter: Sam Adams, World Resources Institute (WRI)

Comments: WRI has published a research report showing that Virginia can meet and exceed the CPP requirements. There is an opportunity for Virginia to meet and exceed the CPP requirements and do it in a way that will be economically advantageous.

Commenter: Kristin Meek, Associate, World Resources Institute (WRI)

Comments: WRI released an independent analysis today that shows Virginia can meet and surpass its CPP requirements by meeting its existing clean energy goals and making better use of its existing fleet of natural gas plants. Virginia has the opportunity to minimize compliance costs, ensure reliability, and harness economic opportunities in clean energy. Virginia's power plants have already reduced CO₂ emissions by over 20% between 2005 and 2012. As a result of new renewable sources coming online and decreases in coal fired generation, by 2030 CO₂ emissions from Virginia's existing fossil fuel fleet should fall by about 8% below 2012 levels. These actions, which are already planned, would achieve about 1/3 of the total reductions Virginia needs between 2012 and 2030 in order to meet its mass based target under the CPP. A number of

economically advantageous actions could be used to meet the remaining targets. Following through on existing energy efficiency and renewable energy targets would allow Virginia to surpass its mass based targets. Virginia can go even further by increasing generation at its natural gas power plants. More investment in energy efficiency will reduce demand and could lower electricity bills. Increasing energy efficiency is important because electric generation is expected to increase by about 40% by 2030 partly due to rising demand. Studies have shown that energy efficiency can curb this demand growth while also lowering energy bills. Investing in renewable energy could lead to economic benefits. Virginia must choose whether to use the standard only for existing power plants or to adopt the new source complement standard that would apply to both existing and new power plants. Because electric generators plan to build new gas power plants, if Virginia does not adopt the new source complement standard the state could end up emitting more CO₂.

Commenter: Terra Pascarosa, Director of Operations, Moms Clean Air Force
Comments: Terra Pascarosa is concerned about children's health and air pollution. Air pollution can trigger asthma attacks, interfere with lung development, and increase adverse birth outcomes. Air pollution can also change the climate and trigger extreme weather events. To protect families we must reduce emissions from existing power plants. Virginia should do everything it can to support the CPP. Virginia's state plan should stimulate the development of clean, reliable, and affordable energy and use 21st century sources such as solar and wind. Because Virginia shares many of its natural resources it seems advantageous for Virginia to take a regional approach to the CPP. Ms. Pascarosa supports an open process to create a strong state plan.

Commenter: Alden Cleanthes, Moms Clean Air Force
Comments: Alden Cleanthes supports the CPP but opposes any use of the CPP process to facilitate approval of the Atlantic Coast Pipeline or uranium mining.

Commenter: Theo Giesy
Comments: Theo Giesy lives in Virginia Beach and has observed the effects of sea level rise and flooding in her community. She supports reducing CO₂ emissions but does not support an increased use of nuclear energy, fracked natural gas, or offshore drilling. Ms. Giesy supports offshore wind and solar as sources of clean energy.

Commenter: Bastillo Gomez III
Comments: Bastillo Gomez is concerned that rising sea levels will harm the environment and supports action to protect the environment.

Commenter: Jacqueline Lowe
Comments: Jacqueline Lowe supports the CPP and a focus on renewable energy because of Hampton Roads' vulnerability to sea level rise. Virginia must take action to protect investments in tourism, military infrastructure, and communities. A state plan focused on efficiency, renewables, and investment in mitigation and adaptation is

crucial to protect coastal communities. As a consumer, Ms. Lowe wants to see fair prices but as a student of economics she knows that we do not pay the fair price of the fossil fuels that we use; and it is not a price that she wants to pay. Multiple studies have shown that consumers can save money if Virginia embraces energy efficiency and renewable energy. Investing in energy efficiency and renewables can lower electricity bills, spur innovation, and create good paying jobs. A strong state plan can be a catalyst for growth in the new Virginia economy.

Commenter: Neal Barber, Virginia Housing Coalition

Comments: Neal Barber said that multifamily residential housing stock in Virginia represents about 385,000 units, or about 12% of Virginia's housing stock, and a recent study by Energy Efficiency for All indicated that there could be an energy reduction by about 28% over the next 20 years through the use of energy conservation, energy efficiency, and renewable energy in those structures. Mr. Barber supports policies to promote energy conservation in multifamily residential housing stock, and is also submitting written comments.

Commenter: Judy Hinch

Comments: Judy Hinch supports the CPP and efforts to move away from coal and other fossil fuels. This area is already seeing the effects of sea level rise and it is important for Virginia to be a leader in cutting carbon. Virginia should join the RGGI. Joining RGGI will reduce carbon emissions, will not increase energy costs, and will generate revenue for reinvestment, which could be used to improve resiliency to flooding in Hampton Roads. Virginia should also follow the military's lead in investing in solar and wind. Virginia should invest in clean energy and adaptation because sea level rise and flooding are here with us to stay, and will only get worse. A cap and trade market solution or a carbon tax are two ways to generate funds to transition to clean energy. Ms. Hinch also supports energy efficiency and reliability in generation and transmission, and supports microgrids and other ways to improve efficiency and reliability at the local level. These innovations will create new jobs and a new Virginia green economy.

Commenter: Pat Okerlund

Comments: Pat Okerlund supports the CPP. Right now there is historic flooding in South Carolina and there has also been flooding in Hampton Roads. These are examples of the types of storm systems climate scientists have warned about for years as a likely consequence of global warming. While climate change does not cause hurricanes and intense rainstorms it makes them stronger. The west is seeing droughts, the northwest is on fire, and Alaska at times is warmer than Virginia. What Virginia does or does not do not only affects Virginia, but the entire world. Virginia needs to get away from dirty energy and move towards energy efficiency and clean renewables such as solar and offshore wind power. These energy sources are clean and would be profitable to Virginia, creating tens of thousands of jobs and boosting the economy. Ms. Okerlund does not support coal. Natural gas is more expensive than solar energy, and biomass could destroy more forests. Virginia is behind other states in renewable energy and

should join RGGI.

Commenter: Angela Harris, Southeast Care Coalition

Comments: Angela Harris said that the Southeast Care Coalition has been advocating for the CPP to make environmental justice a priority at the federal level. First, Ms. Harris supports meaningful engagement, moving beyond the general public to ensure that those impacted are speaking. Second, Ms. Harris supports expanding the EPA's environmental justice analysis, and wants Virginia to systematically consider how the CPP will directly or indirectly overburden communities like the southeast community. Third, Ms. Harris wants an environmental justice advisory team for the entire process.

Commenter: Matt Davis, New Virginia Majority

Comments: The CPP is a good start. Virginia should write a strong state plan that is based on environmental justice and benefits all communities. DEQ must commit to inclusive participation that goes beyond this initial listening session for seeking input. The state implementation plan needs to ensure that revenue generated from a climate policy will help high poverty neighborhoods fund mitigation efforts and communities with the worst air quality and flooding. New industries generated through the clean power plan must be distributed throughout the state, particularly in communities with high unemployment and most affected by pollution, adverse weather due to climate change, and flooding.

Commenter: Gilda Niknezhad

Comments: Gilda Niknezhad is a long-time Norfolk resident and her coastal community is regularly flooded, causing significant loss of property, and currently there is flooding in South Carolina. These storms are a direct result of CO2 emissions and its impact on our environment. Ms. Niknezhad is a health care provider and often treats recurring respiratory illnesses in the elderly. Power plants are the largest contributor to air pollution. With the CPP and renewable energy air quality in Virginia can be improved.

Commenter: Zach Jarjoura, Sierra Club

Comments: Zach Jarjoura said that the CPP is a huge opportunity for Virginia to boost its economy. Virginia lags behind in renewables: Virginia has installed 12 MW of solar, while Maryland has 215 MW of solar and North Carolina has 954 MW of solar. The CPP is an opportunity for Virginia to expand its economy, specifically in Hampton Roads with offshore wind. Virginia also ranks at the bottom in terms of energy efficiency and has a lot of room to improve. Virginia's plan should go all in on renewables – which can be cheaper and lower energy bills, and energy efficiency. Virginia's plan needs to count emissions from existing sources and new sources.

Commenter: Mark Geduldig-Yatrofsky

Comments: Mark Geduldig-Yatrofsky, the publisher of PortsmouthCityWatch.org, said that he has been a citizen adviser to DEQ before. Panels and task forces are assembled, various interests are brought together, regulations are issued, and then the

legislature undercuts, amends, and revises the regulations to make them acceptable to the big players. To make this process different, stakeholders must become frequent communicators with Virginia's delegates, senators, and statewide executive branch officials and tell them that this is important. Mr. Geduldig-Yatrosfsky wants DEQ to make electric utilities provide green power by clamping down on what they are allowed to emit. Also, nuclear power should not count as green power.

Commenter: Nathan Goldin

Comments: Nathan Goldin said there are certain parochial concerns in each community. Hampton Roads is a vulnerable and overburdened community – government properties, shipyards, and naval bases are terrible polluters. The federal government owes this region a lot, and the way it can help is to help this area with renewable energy. Renewable energy is an active, ongoing field – the price of solar is decreasing, battery storage is increasing – and we will miss opportunities if we keep thinking about renewable energy the way it was years ago. The barriers to advancement are political, but we have an opportunity here.

Commenter: Tanterrian Taylor, Sierra Club

Comments: Children, adults, and community leaders need to be taught not to dispose of plastic bags in sewer systems.

Commenter: Michael Adams

Comments: Virginia has an opportunity to show national and global leadership in providing healthier communities, fostering greater independence, ensuring the modernization and thereby security of our infrastructure, and spurring economic growth. Virginia must rise above an antiquated economic system reliant on unfettered use of fossil fuel based resources. Virginia has the opportunity to lead the way by raising its energy savings goal of 10% by 2022 and working toward that target. As the state ramps up infrastructure investment to shift the spending on electricity to more economically productive endeavors, Virginia will enjoy job growth, wage growth, and an increase in consumer spending. The transformation of the utility sector starts with investment in sustained energy efficiency, but is crowned by the proliferation of renewable energy sources throughout the state. Finally, as we create a new class of successful workers we have an opportunity to reach into our underserved and depressed populations.

Commenter: Bret Folger

Comments: Virginia needs to do more to address the environmental challenges that are becoming apparent in Hampton Roads, throughout the United States, and around the world. Norfolk is the second most vulnerable city in the United States to sea level rise, behind only New Orleans. Virginia should not focus on natural gas as an easy way out; natural gas still puts greenhouse gases into the atmosphere. The state should support coastal resiliency and bottom-up initiatives. Virginia needs to stop planning for now and focus on the future. One way to do this is to support RGGI. Lastly, we cannot allow big players to stop common sense initiatives to slow down the effects of climate change.

Commenter: Ray Crabbs

Comments: Energy is a complex issue; there is no one right answer but we need a comprehensive answer for the long term. We have already looked at carbon loading. Everyone agrees that adding more carbon into the environment is not good, so it does not matter whether or not it causes global warming. Mr. Crabbs also asked why we bury used auto tires with a BTU value of 12,000 to 13,000 per pound while we are digging up the tops of mountains in West Virginia to get coal with the same BTU level. Coal is, and will be, part of the answer for the future. We are continuing to look at the cost of fuel, and when we are on the cusp of finding an alternative source of fuel suddenly the cost of oil decreases. The difficulty we are encountering is that climate change is changing the economy. For example, agriculture is no longer as effective in some areas as it has been previously. We need a comprehensive energy blueprint for the long-term, and that future must include a transition period. Germany has figured out how to use coal and meet clean energy standards for the European Union by converting coal to synthesis gas, which can be converted to electricity and puts less carbon into the environment. Mr. Crabbs also supports the use of ethanol made from trash.

Commenter: J. Kreger

Comments: J. Kreger asked who the listeners were and whether anyone was present from the state. Ms. Kreger supports the previous comments. On Sunday she observed flooding at The Hague. She is concerned that the state is moving slowly and private economic interests are influencing public policy. Ms. Kreger would like to see Virginia be more forward thinking, recognize the problem, and come up with some policies to address the issue. RGGI is a great example. Wind and solar are also good ideas.

Commenter: Jeff Staples

Comments: Jeff Staples, candidate for House of Delegates in the 81st district and Vice President of the Chesapeake Bay Group Sierra Club, enjoys deer hunting and fishing. In his personal experiences he has noticed that it is getting warmer and fawns are smaller in November, which he thinks is caused by warmer weather pushing back the deer mating season. Mr. Staples also gardens and has noticed invasive species in his garden. Climate change is real and it needs to be addressed.

Commenter: Flynn Gladden

Comments: We are looking at this problem the wrong way. We are trying to make all of these changes at once when we really need to pick at it. Energy companies have unlimited funds and politicians need money. The way to solve this problem is to slowly take away money from the energy companies by focusing on the individual consumer. Consumers should be enticed with carrots rather than sticks. He supports incorporating smarter design in buildings, capturing the gravitational energy from rainwater falling off of rooftop surfaces, and capturing thermal energy from water.

Commenter: John Luker

Comments: Many costs, such as health and environmental costs, are not captured in market prices. If those costs were properly accounted for we would not be having this conversation and we would be doing the right thing. Other countries are shutting down their coal plants and moving to renewable energy. Clean air and clean water should be basic rights; if we use coal we cannot have clean air and water. Mr. Luker supports clean energy and wants Virginia to stop supporting dirty fuels.

Commenter: Harrison Wallace

Comments: Harrison Wallace works with the Chesapeake Climate Action Network as a Lead Organizer in Hampton Roads. Mr. Wallace supports RGGI. In the upcoming General Assembly session the Virginia Coastal Protection Act will be coming up, which is a way to join the program and for Virginia to become a clean energy state in the south. RGGI would allow Virginia to obtain \$200 million, \$100 million of which would come to Hampton Roads to protect the area from flooding. Mr. Wallace encourages DEQ to advise the Governor to enroll Virginia in RGGI.

[End of the sign-up sheet.]

Commenter: Unknown Name

Comments: To replace coal Virginia could use tax incentives to move new energy companies, such as wind and solar companies, to Southwest Virginia to make up for lost coal jobs.

Commenter: Atiba Muse

Comments: Atiba Muse supports energy efficiency, which is the cheapest and easiest way to reduce carbon emissions. Virginia should first prioritize significant increases in energy efficiency. The next best way to reduce carbon emissions is with zero emission renewable energy such as wind and solar. Virginia has a lot of unrealized potential for renewable energy, and the time to act is now.

Commenter: Angela Harris

Comments: Angela Harris from the Southeast Care Coalition asked everyone who has not signed up for the Virginia Climate Action Network to do so and to contact their elected officials.

Commenter: Unknown Name

Comments: Reducing carbon pollution from power plants will not only save money but it will save lives. Every \$1 invested under the CPP will result in \$7 of health benefits. The CPP will spur innovation and create jobs. The Governor has estimated that the clean energy economy could create up to 40,000 jobs, 10,000 of those with offshore wind alone. According to the Department of Energy the potential offshore wind resources in the lower 48 states exceeds the entire electricity demand. There is only one planet Earth, and there is no plan b.

Commenter: Unknown Name

Comments: She opposes mountain top removal. She also wants to make sure that people do not blow leaves and other yard waste into sewer and drain systems.

Commenter: Unknown Name

Comments: Rather than using the term “global warming” or “climate change” we should talk about these decisions as “the right thing to do” and not put a label on it.

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