To:

Subject: RE: Public Comment in PSC Case #2022-00402

Date: Thursday, July 13, 2023 1:06:00 PM

Case No. 2022-00402

Thank you for your comments on the application of Kentucky Utilities Company and Louisville Gas and Electric Company. Your comments in the above-referenced matter have been received and will be placed into the case file for the Commission's consideration. Please cite the case number in this matter, 2022-00402, in any further correspondence. The documents in this case are available at View Case Filings for: 2022-00402 (ky.gov)

Thank you for your interest in this matter.

From: "jordan conley-endicott"

Sent: Friday, July 7, 2023 10:40 AM

To: PSC Public Comment < PSC.Comment@ky.gov> **Subject:** Public Comment in PSC Case #2022-00402



Dear Public Service Commission,

I do not support investing in Fossil Fuels.

Sincerely, jordan conley-endicott

1253 South Preston Street Louisville, KY 40203 United States From: PSC Public Comment

To:
Subject: RE: KY PSC Utility Inquiry

Date: Thursday, July 13, 2023 1:08:00 PM

Case No. 2022-00402

Thank you for your comments on the application of Kentucky Utilities Company and Louisville Gas and Electric Company. Your comments in the above-referenced matter have been received and will be placed into the case file for the Commission's consideration. Please cite the case number in this matter, 2022-00402, in any further correspondence. The documents in this case are available at <u>View Case Filings for: 2022-00402 (ky.gov)</u>

Thank you for your interest in this matter.

From: PSC Consumer Inquiry <PSC.Consumer.Inquiry@ky.gov>

Sent: Friday, July 7, 2023 7:38 AM

To: PSC Public Comment <PSC.Comment@ky.gov>

Subject: FW: KY PSC Utility Inquiry

From: KY Public Service Commission cfilings@ky.gov>

Sent: Thursday, July 6, 2023 9:07 PM

To: PSC Consumer Inquiry < PSC.Consumer.Inquiry@ky.gov>

Subject: KY PSC Utility Inquiry

Below is the result of your feedback form. It was submitted by (

Thursday, July 6, 2023 at 9:06 PM

Name: Bulus Said Address: 442 Retrac Rd.

City: Lexington

State: Ky

Zip Code: 40503

Phone number where you can be reached:

Home phone:

Utility Name: Lg&e ku

State the nature of your concern: So far this year we had 3 power outages and every time the outage map provided by their website is almost identical to the previous outage. LG&E KU must start working on the core of the problem not just restoring power. It seems to me that there are problems in some areas of the power grid that must be fixed to help making power outages a thing of the past for the city of Lexington and hopefully the whole state.

Have you contacted the utility about the problem: Yes

To:

Subject: RE: Public Comment in PSC Case #2022-00402

Date: Thursday, July 13, 2023 1:11:00 PM

Case No. 2022-00402

Thank you for your comments on the application of Kentucky Utilities Company and Louisville Gas and Electric Company. Your comments in the above-referenced matter have been received and will be placed into the case file for the Commission's consideration. Please cite the case number in this matter, 2022-00402, in any further correspondence. The documents in this case are available at View Case Filings for: 2022-00402 (ky.gov)

Thank you for your interest in this matter.

From: Annette Hines

Sent: Monday, July 10, 2023 1:10 PM

To: PSC Public Comment < PSC.Comment@ky.gov> **Subject:** Public Comment in PSC Case #2022-00402



Dear Public Service Commission,

Hello,

Companies need to track need (energy burden), energy insecurity (arrearages and disconnections), and utility retrofits better - and make that data publicly available.

The companies need to support energy efficiency financing programs that are maximally inclusive and do not neglect particular income groups. Support programs that address the problem of split incentives between landlords and tenants.

The reach of the proposed low income weatherization and efficiency programs is far too limited. We need to lower pollution levels and threats of extreme temperatures and extreme weather events . These extremes threaten our health, agriculture, and economy.

These threats are expensive and these costs need to be factored in. They need to offer better value for rooftop solarl support the comment submitted by Kentuckians for Energy Democracy.

The state requires that utilities submit a 15 year plan for review by the Public Service Commission every 3 years. In the most recently submitted plan (2021) there was no mention of new gas plants. LG&E and KU need to take the regulatory planning process seriously and use the processes in place in planning for future capacity needs.

Thank you for ensuring that Kentuckians' voices are an important part of the regulatory process.

Sincerely, Annette Hines

315 Boardwalk Morehead, KY 40351 United States

To:

Subject: RE: Public Comment in PSC Case #2022-00402

Date: Thursday, July 13, 2023 1:13:00 PM

Case No. 2022-00402

Thank you for your comments on the application of Kentucky Utilities Company and Louisville Gas and Electric Company. Your comments in the above-referenced matter have been received and will be placed into the case file for the Commission's consideration. Please cite the case number in this matter, 2022-00402, in any further correspondence. The documents in this case are available at View Case Filings for: 2022-00402 (ky.gov)

Thank you for your interest in this matter.

From: Mason Kalinsky

Sent: Monday, July 10, 2023 1:10 PM

To: PSC Public Comment < PSC.Comment@ky.gov> **Subject:** Public Comment in PSC Case #2022-00402



Dear Public Service Commission,

Yesterday was the hottest day on record ever, narrowly beating out the day before. Last week was a "storm of the century" that no one is calling that because it happens every couple weeks. We can no longer pretend climate change is not real. It's real. It's happening. We need to invest our money in reducing the impact it's going to have. We desperately need to end reliance on fossil fuels.

I support the comment submitted by Kentuckians for Energy Democracy.

Thank you for ensuring that Kentuckians' voices are an important part of the regulatory process.

Sincerely, Mason Kalinsky Lexington, KY 40517 United States

To:

Subject: RE: Public Comment in PSC Case #2022-00402

Date: Thursday, July 13, 2023 1:13:00 PM

Case No. 2022-00402

Thank you for your comments on the application of Kentucky Utilities Company and Louisville Gas and Electric Company. Your comments in the above-referenced matter have been received and will be placed into the case file for the Commission's consideration. Please cite the case number in this matter, 2022-00402, in any further correspondence. The documents in this case are available at View Case Filings for: 2022-00402 (ky.gov)

Thank you for your interest in this matter.

From: Emily Boone

Sent: Thursday, July 13, 2023 11:19 AM

To: PSC Public Comment < PSC.Comment@ky.gov> **Subject:** Public Comment in PSC Case #2022-00402



Dear Public Service Commission,

I support the comment submitted by Kentuckians for Energy Democracy.

Thank you for ensuring that Kentuckians' voices are an important part of the regulatory process.

LG&E is NOT being customer friendly by closing all the offices to customers so that customers may have NO, that is NO face to face contact with LG&E to pay their bills or other important reasons that a customer would choose to talk with LG&E in person. Please remedy this policy.

Sincerely, Emily Boone 102 Pope Louisville, KY 40206 United States

To:

Subject: RE: Public Comment in PSC Case #2022-00402

Date: Thursday, July 13, 2023 1:14:00 PM

Case No. 2022-00402

Thank you for your comments on the application of Kentucky Utilities Company and Louisville Gas and Electric Company. Your comments in the above-referenced matter have been received and will be placed into the case file for the Commission's consideration. Please cite the case number in this matter, 2022-00402, in any further correspondence. The documents in this case are available at View Case Filings for: 2022-00402 (ky.gov)

Thank you for your interest in this matter.

From: Ariel Fugate

Sent: Thursday, July 13, 2023 11:19 AM

To: PSC Public Comment < PSC.Comment@ky.gov> **Subject:** Public Comment in PSC Case #2022-00402



Dear Public Service Commission,

Kentucky ranking 44th among states in residential energy efficiency programs and having a 228% increase in utility disconnections in 2022 is unacceptable, but not surprising. We must do everything we can to ensure people can continue to stay in their houses and keep their businesses open. We must expand energy efficiency programs and consider their real impact on reducing supply needs. We must seriously look into other options rather than continuing to rely on costly and polluting fossil fuel plants. We should look at what other, forward thinking states are doing to provide for their customers to where their residents don't have some of the most significant energy burdens in the country, and copy their models here.

Lastly, we must look well into the future to plan our energy needs, and consider ALL the impacts fossil fuels have on our state and globe. Kentucky's state ranking for impact on the environment is the worst in the US. Our changing climate is already impacting our state, with historic flooding events in 2020, 2021 and 2022. Utilities like LGE KU themselves also have to pay for recovery from these disasters, so rate payers potentially face increased costs due to climate disasters in four different ways: increased utility rates, insurance rates, taxes, and personal bills. We don't need to

build new fossil fuel plants and continue this devastating pattern.

There is a lot to consider. These are not easy decisions to make, but in 2023, there's more affordable and reliable clean energy technology than ever before. It's time to change how we are doing things.

I support the comprehensive comment submitted by Kentuckians for Energy Democracy. Thank you for ensuring that Kentuckians' voices are an important part of the regulatory process.

Sincerely, Ariel Fugate

3421 Wallingford Court Lexington, KY 40503 United States

To:

Subject: RE: Public Comments for Case: 2022-00402 - Kentucky Utilities Company , Louisville Gas and Electric Company

Date: Thursday, July 13, 2023 1:13:00 PM

Case No. 2022-00402

Thank you for your comments on the application of Kentucky Utilities Company and Louisville Gas and Electric Company. Your comments in the above-referenced matter have been received and will be placed into the case file for the Commission's consideration. Please cite the case number in this matter, 2022-00402, in any further correspondence. The documents in this case are available at View Case Filings for: 2022-00402 (ky.gov)

Thank you for your interest in this matter.

From: Blake Borwig

Sent: Tuesday, July 11, 2023 5:32 PM

To: PSC Public Comment < PSC.Comment@ky.gov>

Subject: Re: Public Comments for Case: 2022-00402 - Kentucky Utilities Company, Louisville Gas and

Electric Company



Dear Public Service Commission,

Please see my attached comments for your review to be added to the public record.

Best regards, Blake Borwig

On Tue, Jul 11, 2023 at 5:12 PM KY Public Service Commission Public Comments < psc.comment@ky.gov> wrote:

Public Comments for Case 2022-00402 submitted by

on Tuesday, July

11. 2023 at 5:12 PM

Name: Blake Borwig

Address: 1240 Versailles Road

City: Lawrenceburg State: Kentucky Zip Code: 40342

Phone number where you can be reached:

Home phone:

Comments: As a concerned Kentuckian, I implore the Public Service Commission to not grant KU and LG&E approval for Certificates of Public Convenience and Necessity (CPCN) for the construction of a natural gas combined cycle combustion turbine facility at LG&E's Mill Creek Generating Station in Jefferson County, Kentucky. It is imperative that Mill Creek's coal-fired generating units need to be retired, but they must not be replaced with another fossil fuel of equal, if not greater, environmental concern: natural gas. At this time, Jefferson County is classified as "moderate" nonattainment for the 2015 8-hour ozone National Ambient Air Quality Standards (NAAQS), meaning it has serious air quality concerns that need to be addressed before more emissions sources are brought to the county. The Mill Creek Generating Station is LG&E's largest coal-fired power plant. Despite Mill Creek's facility having significant measures in place to reduce sulfur dioxide (SO2) emissions, the facility does not have a robust nitrogen oxides (NOx) emissions control strategy. If LG&E constructs gas turbines, which primary emit NOx, at Mill Creek, Jefferson County's nonattainment issues for the 2015 8-hour ozone NAAQS will only be intensified. Currently, the ambient air quality monitor on Watson Lane (AQS: 21-111-0051), located in close proximity to LG&E's Mill Creek Generating Station, has recorded numerous exceedances for the 2015 8-hour ozone NAAQS; the current 4th high maximum design value at the monitor is 0.071 ppm for 2023, which violates the NAAQS. The monitored 4th high maximum design value at this monitor has the potential to rise further if more exceedances occur this year, especially because we are in the midst of the summer ozone season. Thus, adding another NOx emissions source to this area would certainly make continued attainment and maintenance of the 2015 8-hour ozone NAAQS difficult for Jefferson County. In addition to local nonattainment issues in Louisville, the federal government is working to ensure states begin phasing out coal fired and natural gas-fired combustion turbines over the next few decades. On May 23rd, 2023, the U.S. EPA proposed "Greenhouse Gas Standards and Guidelines for Fossil Fuel-Fired Power Plants" (88 FR 33240). With this proposed rulemaking, the U.S. EPA is working to establish greenhouse gas emissions standards that would make the construction of a new natural gas facility at LG&E's Mill Creek location not economically feasible. The control measures necessary for LG&E to comply with the proposed greenhouse gas standards will increase the operating costs at the facility exponentially, costs that will be passed on to energy consumers in our state. Ultimately, the natural gas facility LG&E is wanting to construct at Mill Creek will not be a reliable source of affordable electricity as natural gas and coal power plants are forced to retire. Given the pressures from the federal government to transition away from fossil fuels, LG&E cannot expect this facility to remain in service for 30 to 40 years (as it currently has expressed interest in), which is far beyond their publicized 2050 net zero emissions goal. Allowing utility companies to construct more of fossil fuel powered electric generating facilities in Kentucky is not equitable. Instead, I recommend that KU and LG&E introduce renewable energy sources into our state's energy grid without delay. Moreover, I support the utilities companies' application for CPCNs to acquire solar facilities in Mercer County and Marion County. I encourage KU and LG&E to pursue more opportunities to bring solar energy to the Commonwealth of Kentucky to ensure grid reliability as the state decreases its heavy reliance on fossil fuels for energy production. LG&E and KU's energy portfolio is currently about 1% renewable, and this is entirely unacceptable.

------This is a Copy of the email sent to KY Public Service

Commission for Public Comments on Case 2022-00402. This email is automatically generated please do not reply to this email address.

RE: Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates and Approval of a Demand Side Management Plan Case No. 2022-00402

Commissioners Chandler, Hamilton, and Regan,

As a concerned Kentuckian, I implore the Public Service Commission to not grant KU and LG&E approval for Certificates of Public Convenience and Necessity (CPCN) for the construction of a natural gas combined cycle combustion turbine facility at LG&E's Mill Creek Generating Station in Jefferson County, Kentucky. It is imperative that Mill Creek's coal-fired generating units need to be retired, but they must not be replaced with another fossil fuel of equal, if not greater, environmental concern: natural gas.

At this time, Jefferson County is classified as "moderate" nonattainment for the 2015 8-hour ozone National Ambient Air Quality Standards (NAAQS), meaning it has serious air quality concerns that need to be addressed before more emissions sources are brought to the county.

The Mill Creek Generating Station is LG&E's largest coal-fired power plant. Despite Mill Creek's facility having significant measures in place to reduce sulfur dioxide (SO₂) emissions, the facility does not have a robust nitrogen oxides (NOx) emissions control strategy. If LG&E constructs gas turbines, which primary emit NOx, at Mill Creek, Jefferson County's nonattainment issues for the 2015 8-hour ozone NAAQS will only be intensified.

Currently, the ambient air quality monitor on Watson Lane (AQS: 21-111-0051), located in close proximity to LG&E's Mill Creek Generating Station, has recorded numerous exceedances for the 2015 8-hour ozone NAAQS; the current 4th high maximum design value at the monitor is 0.071 ppm for 2023, which violates the NAAQS. The monitored 4th high maximum design value at this monitor has the potential to rise further if more exceedances occur this year, especially because we are in the midst of the summer ozone season. Thus, adding another NOx emissions source to this area would certainly make continued attainment and maintenance of the 2015 8-hour ozone NAAQS difficult for Jefferson County.

In addition to local nonattainment issues in Louisville, the federal government is working to ensure states begin phasing out coal fired and natural gas-fired combustion turbines over the next few decades. On May 23rd, 2023, the U.S. EPA proposed "Greenhouse Gas Standards and Guidelines for Fossil Fuel-Fired Power Plants" (88 FR 33240). With this proposed rulemaking, the U.S. EPA is working to establish greenhouse gas emissions standards that would make the construction of a new natural gas facility at LG&E's Mill Creek location not economically feasible. The control measures necessary for LG&E to comply with the proposed greenhouse gas standards will increase the operating costs at the facility exponentially, costs that will be passed on to energy consumers in our state. Ultimately, the natural gas facility LG&E is wanting to construct at Mill Creek will not be a reliable source of affordable electricity as natural gas and coal power plants are forced to retire. Given the pressures from the federal government to

transition away from fossil fuels, LG&E cannot expect this facility to remain in service for 30 to 40 years (as it currently has expressed interest in), which is far beyond their publicized 2050 net zero emissions goal. Allowing utility companies to construct more of fossil fuel powered electric generating facilities in Kentucky is not equitable. Instead, I recommend that KU and LG&E introduce renewable energy sources into our state's energy grid without delay.

Moreover, I support the utilities companies' application for CPCNs to acquire solar facilities in Mercer County and Marion County. I encourage KU and LG&E to pursue more opportunities to bring solar energy to the Commonwealth of Kentucky to ensure grid reliability as the state decreases its heavy reliance on fossil fuels for energy production. LG&E and KU's energy portfolio is currently about 1% renewable, and this is entirely unacceptable.

Warmest regards,



To:

 Subject:
 RE: Comments to case nr. 2022-00402

 Date:
 Thursday, July 13, 2023 1:10:00 PM

Case No. 2022-00402

Thank you for your comments on the application of Kentucky Utilities Company and Louisville Gas and Electric Company. Your comments in the above-referenced matter have been received and will be placed into the case file for the Commission's consideration. Please cite the case number in this matter, 2022-00402, in any further correspondence. The documents in this case are available at View Case Filings for: 2022-00402 (ky.gov)

Thank you for your interest in this matter.

From: Kris ODaniel

Sent: Monday, July 10, 2023 8:42 AM

To: PSC Public Comment < PSC.Comment@ky.gov>

Subject: Comments to case nr. 2022-00402

sites.



<u>Public Comment: LG&E and KU planned investments in building two gas plants to replace aging coal plants. INC. CASE NUMBER 2022 - 00402</u>

Dear Public Service Commission

psc.comment@ky.gov 2022-00402

This is about safeguarding Kentucky's energy security future, providing energy at the lowest possible cost to generate and distribute (1) and the lowest price to society. Slashing carbon emissions is pivotal.

LGE and KU, the largest electric utility provider, plan to retire two outdated coal plants and add two 641 MW Combined Cycle Gas Turbines. That's the opposite. They also plan to add two 125 MW photovoltaic solar sites and a 125 MW battery unit, making a token commitment for solar

development.

It can be established that staying with coal or natural gas, no matter how "clean it is produced," has only led to serious health issues, poverty, and exploitation of land rather than establishing developed infrastructure.

• The negative health benefits for Kentucky on top of the economic failures can be illustrated using EPA's 2022 updated Benefits Per Kilowatt (BPK) values (2). The estimated health benefit of investing in a 10 MW Utility Scale solar facility is between \$400,000-900,000 annually in Eastern Kentucky and \$350,000-700,000 in the rest of Kentucky. Covering most of the solar installation cost.

It has also led to debt for ratepayers to deal with in the long term:

• Senate Bill 192, introduced by Sen. Phillip Wheeler(R), "allows investor-owned utilities (like LGE and KU) to use securitization to recover costs associated with the retirement of a powerplant or other significant assets as well as the cost incurred in severe weather events rather than seeking rate increases. Securitization allows a utility to refinance financial obligations to lower the cost to ratepayers by converting the short-term debt to longer-term secured dept."

It's a deception not simply to state that securitization is about allowing debt incurred to prop up the use of coal that the ratepayers are left to pay over a long time. SB192 would deter rate increases for future generations.

From a business perspective, Kentucky's narrow focus on fossil fuels is a failing investment strategy. The Eastern region never benefitted from coal except for short-term job opportunities. Long-term, folks in coal jobs got sick with little help when needed. The region enjoyed no investment in infrastructure, which should have been second nature for any company involved in extracting the monetary benefits. Coal barons, not the citizens, still benefit!

According to S&P Global, renewable energy capacity contracted by U.S. corporations soared 45% in the last 12 months as greater energy security concerns magnify energy supply and demand shifts. (3)

The market demands renewable energy with a resilient transmission system. This is where all investments are focused, where assets, better health, and prosperity are secured. The Corporate sector, Insurance companies, and citizens are exhausted trying to cope with the escalating out-of-control cost we are all experiencing because of climate havoc.

LGE and KU, given their dominance in the market, need to take the responsible lead for the sake of Kentucky. Fossil fuels do not provide a safe energy future but lead to further debt and destruction.

- 1. 2023 Levelized Cost Of Energy+ | Lazard
- 2. Attached files: Estimating the Public Health Benefits with EPA's Benefits Per Kilowatt
- 3. <u>Visualizing corporate renewables contracted in the US and around the world | S&P Global Market Intelligence (spglobal.com)</u>

With best regards

Kris O'Daniel 647 Beechland Road Springfield, KY 40069 <u>Public Comment: LG&E and KU planned investments in building two gas plants to replace aging coal plants.</u> INC. CASE NUMBER 2022 - 00402

Dear Public Service Commission

psc.comment@ky.gov 2022-00402

This is about safeguarding Kentucky's energy security future, providing energy at the lowest possible cost to generate and distribute (1) and the lowest price to society. Slashing carbon emissions is pivotal.

LGE and KU, the largest electric utility provider, plan to retire two outdated coal plants and add two 641 MW Combined Cycle Gas Turbines. That's the opposite. They also plan to add two 125 MW photovoltaic solar sites and a 125 MW battery unit, making a token commitment for solar development.

It can be established that staying with coal or natural gas, no matter how "clean it is produced," has only led to serious health issues, poverty, and exploitation of land rather than establishing developed infrastructure.

- The negative health benefits for Kentucky on top of the economic failures can be illustrated using EPA's 2022 updated Benefits Per Kilowatt (BPK) values (2). The estimated health benefit of investing in a 10 MW Utility Scale solar facility is between \$400,000-900,000 annually in Eastern Kentucky and \$350,000-700,000 in the rest of Kentucky. Covering most of the solar installation cost.

It has also led to debt for ratepayers to deal with in the long term:

- Senate Bill 192, introduced by Sen. Phillip Wheeler(R), "allows investor-owned utilities (like LGE and KU) to use securitization to recover costs associated with the retirement of a powerplant or other significant assets as well as the cost incurred in severe weather events rather than seeking rate increases. Securitization allows a utility to refinance financial obligations to lower the cost to ratepayers by converting the short-term debt to longer-term secured dept."

It's a deception not simply to state that securitization is about allowing debt incurred to prop up the use of coal that the ratepayers are left to pay over a long time. SB192 would deter rate increases for future generations.

From a business perspective, Kentucky's narrow focus on fossil fuels is a failing investment strategy. The Eastern region never benefitted from coal except for short-term job opportunities. Long-term, folks in coal jobs got sick with little help when needed. The region enjoyed no investment in infrastructure, which should have been second nature for any company involved in extracting the monetary benefits. Coal barons, not the citizens, still benefit!

According to S&P Global, renewable energy capacity contracted by U.S. corporations soared 45% in the last 12 months as greater energy security concerns magnify energy supply and demand shifts. (3)

The market demands renewable energy with a resilient transmission system. This is where all investments are focused, where assets, better health, and prosperity are secured. The Corporate sector, Insurance companies, and citizens are exhausted trying to cope with the escalating out-of-control cost we are all experiencing because of climate havoc.

LGE and KU, given their dominance in the market, need to take the responsible lead for the sake of Kentucky. Fossil fuels do not provide a safe energy future but lead to further debt and destruction.

- (1) 2023 Levelized Cost Of Energy+ | Lazard
- (2) Attached files: Estimating the Public Health Benefits with EPA's Benefits Per Kilowatt
- (3) <u>Visualizing corporate renewables contracted in the US and around the world | S&P Global Market Intelligence (spglobal.com)</u>

Kris O'Daniel - 647 Beechland Road - Springfield - KY 40069 - krisodaniel@ncsmail.net

2022 DOLLAR Benefits Per Kilowatt-Hour from SOLAR

Estimated Public Health Savings due to better Air QualityUPDATED

with *EPA's BPK values-2nd edition, 2021

Introduction

State and local government policymakers have increasingly been asking for the U.S. Environmental Protection Agency (EPA) to help understand the opportunities for using energy efficiency and renewable energy (EE/RE) to reduce air pollution and improve public health.

Many recognize that EE/RE projects, programs, and policies can reduce air pollution emissions from the electric power sector either by decreasing demand for electricity generation or displacing fossil fuel-based generation with zero-emitting generation sources.

They also recognize that these avoided emissions of fine particulate matter (PM2.5) and other precursor pollutants may lead to tangible public health benefits, such as reducing the number of premature deaths, incidences of respiratory and cardiovascular illnesses, and missed work and school days.



In many cases, state and local decision-makers are not quantifying or fully accounting for the health benefits of existing or planned EE/RE projects, programs, and policies in their decision-making processes. EPA has found that state and local decision-makers may not be fully aware of or confident in the available quantification tools and methods, or they lack the time, resources, or expertise needed to quantify the health benefits.

<u>The 3% and 7% discounts rates</u> are used in economic analysis to evaluate future benefits against a current capital investment. In this case, a capital investment in energy efficiency, that produces future benefits in energy bill savings and health expenses.

A 3% discount rate is considered "low" and appropriate for public investments; a 7% discount rate is more reflective of the return that a private investor would seek.

ANNUAL Monetized Public Health Benefits investing in a 10-Megawatt Utility-Scale Solar facility in Kentucky

The estimated health benefits of installing a 10-megawatt solar facility in Kentucky (providing an average of 1,000 homes) is calculated using the BPK values for tree AVERT regions: **Midwest** covering most of KY, **Mid Atlantic** covering most of Eastern KY, and **Tennessee** covering the TVA regulated utility region. The BPK values are then multiplied with the electricity generated from the 10 MW PV solar facility. All regions generate 13.3 million kWh per year according to https://pvwatts.nrel.gov/index.php.

	Majority of Kentucky The Midwest AVERT Region			Mostly Eastern Kentucky The Mid Atlantic AVERT Region			The TVA regulated utility region The Tennessee AVERT Region		
Type of BPK Value	BPK value Cents/kWh	Generation from 10 MW SOLAR	Estimat- ed Health Benefits	BPK value Cents/kWh	Generation from 10 MW SOLAR	Estimat- ed Health Benefits	BPK value Cents/kWh	Generation from 10 MW SOLAR	Estimated Health Benefits
The low estimate, 3% discount	2.65	13.3 mil- lion kWh	\$352,450	3.10	13.3 mil- lion kWh	\$412,300	0.84	13.3 mil- lion kWh	\$111,720
The high estimate, 3% discount	5.98		\$795,340	7.00		\$931,000	1.89		\$251,370
The low estimate, 7% discount	2.36		\$313,880	2.77		\$368,840	0.75		\$99,750
The high estimate, 7% discount	5.33		\$708,890	6.25		\$831,250	1.68		\$223,440

The annual dollar value from public health savings are for every 10 MW SOLAR PV \$350,000-\$800,000 for the significant part of Kentucky \$400,000-900,000 annually in Eastern Kentucky \$100,000-250,000 annually in the TVA regulated territory Distributed Solar will provide a matching amount of savings to the Commonwealth.

The cost installing Solar PV - thin film Utility-Scale is 2.8-3.7 cents/kWh. <u>Installing 13.3 million kWh solar is \$372,400 - \$492,100</u>.

The installation cost is for the most, more than covered by the estimated savings in health benefits.