Keasbey Energy Center Environmental Justice Responses to Comments and Questions June 2023

- Q: Is there a need for the electricity that the proposed Keasbey Energy Center would generate?
- A: New Jersey has ambitious electrification goals for both the transportation and building sectors, which will require a significant amount of new energy resources, in addition to the state's existing power generation. The region's grid operator, Pennsylvania-New Jersey- Maryland (PJM) Interconnection, has also indicated that the region could face energy shortages as early as 2030, without significant new generation entry. <u>https://www.pjm.com/-/media/library/reports-</u> <u>notices/special-reports/2023/energy-transition-in-pjm-resource-retirements-replacements-andrisks.ashx?bcs-agent-scanner=b82e5acb-39f5-2946-aa69-ab40084c6b3d</u>
- *Q:* Governor Murphy has mandated a shift to electrification. How does New Jersey get there without natural gas generation?
- A: New Jersey's shift towards significant electrification across the economy will require diversified energy resources, as well as resources that can respond quickly to energy demand changes. Diversified energy resources allow the state to sustainably provide energy to citizens of New Jersey. Current renewable technology does not have the ability to provide dispatchable energy for longer term scenarios such as winter storms, heat waves, and hurricanes.
- Q: Is the Keasbey site radioactive or did it ever have nuclear waste?
- A: The Keasbey location is not radioactive and there is no nuclear waste on site. CPV made significant contributions to remediate and re-use the brownfield site.
- *Q:* Why is the project not allowed to proceed without permission from the Murphy Administration to pollute?
- A: CPV is adhering to state laws and regulations that are standard for a power plant of this type. Under state and federal law, CPV is required to apply for a receive an operating permit under Title V of the Clean Air Act. The New Jersey Department of Environmental Protection (NJDEP) is the permitting authority for the Title V permit.
- Q: How accurate and transparent is CPV's reporting of greenhouse gas emissions?
- A: CPV follows all state and federal requirements for testing and calculation of emissions, which are reported to NJDEP as a condition of the Title V air permit. Specific facility data is available through the EPA's Clean Air Markets Program <u>https://campd.epa.gov/</u> and through the NJDEP via the New Jersey Open Public Records Act (OPRA) at <u>https://www.nj.gov/dep/opra/.</u>
- Q: Does CPV only measure what can be seen in terms of volatile organic compounds emitted from the proposed facility?
- A: The stack testing and monitoring includes several types of emissions, which include volatile organic compounds. The stack testing will be conducted by CPV in accordance with the Title V air

permit and will follow all EPA and NJDEP stack testing method and protocols. The Keasbey Energy Center will also utilize best available control technology to limit the amount of emissions released during plant operation.

- *Q:* How does a fracked gas plant fit into Governor Murphy's pledge to have a 100% clean energy state by 2035?
- A: CPV is unable to speak to Governor Murphy's energy plan.
- Q: How will CPV address the consequences of this proposed expansion?
- A: CPV does not believe that the addition of the Keasbey Energy Center will have negative consequences for the local area or region, and we look forward to providing more dispatchable energy to meet the state's rapid growth in renewable power, while also serving as a supporter for local schools and first responders.
- Q: Why was the riverfront park never built and will it ever be built? Can you make photos of the progress at the waterfront park publicly available?
- A: Pursuant to the Site Redevelopment Agreement between Woodbridge Township and EPEC Polymers and permits authorized by the NJDEP and United States Army Corps of Engineers (USACE), EPEC is constructing a waterfront park in an area of the Site south of the CPV Property. The construction of the waterfront park is ongoing and is being completed concurrent with the required remediation and ecological restoration of the area. The remediation efforts are under the oversight and supervision of the NJDEP-Bureau of Environmental Radiation; and the restoration activities are being performed under permits authorized by the NJDEP Division of Land Resource Protection and the USACE. CPV is unable to make photos of the park available at this time. CPV has completed all work within our scope for the redevelopment agreement.
- Q: Why doesn't CPV construct new natural gas plants at locations that have had recent retirements of coal and oil generating facilities to lower emissions there rather than increase emissions in Keasbey?
- A: CPV has constructed natural gas plants near locations that have had coal generation retirements. Additionally, CPV is in the process of constructing a solar farm at a former coal mine. CPV continues to look for locations that provide responsible energy solutions across the country, which includes new energy facilities on former coal mines. New efficient generation in Keasbey will provide more energy to displace higher emitting and less efficient resources, locally and across the region. Higher emitting resources in other states will impact the air quality of the local Woodbridge community.
- *Q:* The proposed plant would double emissions of the existing plant.
- A: As noted in the presentation during the public information session and in the permit modification application, the total allowable carbon dioxide emissions from both the Woodbridge Energy Center and the Keasbey Energy Center would be just over 4.59 million tons annually. The current permit has a maximum allowable amount of just over 2.23 million tons. Similarly, the permit modification seeks increases of particulate matter, nitrogen oxides, sulfur dioxide, and volatile organic compounds. The Title V permit modification covers both facilities

and not just the Keasbey Energy Center. The air permit application is available at https://www.cpv.com/wp-content/uploads/2023/01/FINAL_Keasbey-Energy-Center_PSD-Application_083116_Sections-1-4_Appendices.pdf and at https://www.cpv.com/wp-content/uploads/2023/01/Keasbey-Energy-Center_PSD-Application_Revised-Section-5_May-2021_FINAL-TO-NJDEP_.pdf.

Third party studies have demonstrated a new state-of-the-art efficient natural gas facility will offset less efficient and higher emitting projects in the region. The region is managed by PJM Interconnection, which runs a daily auction that determines the most efficient power plants that will run to meet expected demand on the following day. We are unable to speculate on the specific plants that will not operate or will operate less because of the Keasbey Energy Center, but we are confident that a new facility will lower the operating hours of the least efficient plants in the region. More information on the PJM Interconnection is available at https://www.pjm.com/.

Based on the most recently available electric generation data by source from the EPA accessed at <u>https://www.epa.gov/egrid/data-explorer</u>, the annual electricity generated in New Jersey is from the following sources, ranked by megawatt-hours produced in 2021:

- 1. Gas 48.0%
- 2. Nuclear 45.7%
- 3. Solar 2.2%
- 4. Coal 1.7%
- 5. Biomass 1.1%
- 6. Other fossil– 1.1%
- 7. Oil 0.1%
- 8. Wind <0.05%

The majority of the current electric generation sources in New Jersey are gas and nuclear (over 93.5% of annual electric generation). CPV anticipates that the Keasbey Energy Center will lower the operating hours of less efficient and higher emitting fossil fuel fired electric generation facilities in the PJM and New Jersey. The following table provides a comparison of the reduction in CO_2 and NO_x emissions that are anticipated as a result of the Keasbey Energy Center displacing less efficient and higher emitting fossil fuel fired electric generations in New Jersey.

Pollutant	Keasbey Energy Center (Ib/MW-hr)	New Jersey Average Fossil Fuel Electric Generation (Ib/MW-hr)	Percent Reduction
NOx	0.05	0.44	88.6%
CO ₂	796	928	14.2%

Based on the reductions of criteria air pollutants and greenhouse gases per megawatt-hour when comparing the Keasbey Energy Center and the New Jersey average for fossil fuel electric

generation, the Keasbey Energy Center would help to offset the statewide emissions of air pollutants from less efficient and higher emitting New Jersey generation sources.

- Q: How does doubling emissions not violate the spirit of the environmental justice law?
- A: Please refer to the prior response for a discussion on potential and anticipated emissions from the Keasbey Energy Center.
- *Q:* How does the building of this facility not fail the minority and low-income families located close to the plant?
- A: Studies have demonstrated that a state-of-the-art highly efficient natural gas generation facility will offset emissions from older less efficient power plants improving the air quality for the region overall. CPV also commits to supporting the local community, not just through taxes that fund many initiatives for all families locally, but also through the direct support to local schools and first responders.
- Q: How often during planning, construction, and operation of these facilities are potential impacts to human health measured?
- A: CPV will follow all monitoring requirements during construction and operation of the Keasbey Energy Center. During operation, emissions data is continuously collected and made publicly available at https://campd.epa.gov/ and through the NJDEP via the New Jersey Open Public Records Act (OPRA) at https://www.nj.gov/dep/opra/. The facility will be mandated by the Title V air permit to monitor emissions of some pollutants continuously using a continuous emissions monitor (CEM) at the exhaust stack. This emissions data is constantly monitored and is reported as required to the NJDEP and EPA. The potential impacts to human health have been modeled as part of the air permit application, which has demonstrated that the facility impacts are in compliance with federal and New Jersey ambient air quality standards and air toxics health risk thresholds. The Title V air permit will include monitoring, record-keeping, and reporting requirements to verify that CPV is complying with the emissions limits in the air permit which have been demonstrated to comply with the air quality standards.
- *Q:* How would this expansion benefit the residents of Woodbridge and the surrounding area?
- A: This expansion provides several benefits to Woodbridge and the surrounding area. Construction and operations of the project increases jobs, provides direct economic activity in the local community, and provides low-cost reliable power that should make the area more attractive to businesses looking to relocate. CPV also commits to supporting the local community, not just through taxes that fund the many initiatives for all families locally, but also through the direct support to local schools and first responders.
- Q: While there would be no new stressors, this proposed plant would double the existing stressors that are present because of the existing Woodbridge Energy Center.
- A: Several factors can contribute to environmental stressors including, but not limited to concentrated areas of air pollution, mobile sources of air pollution, contaminated sites, transfer stations or other solid waste facilities, recycling facilities, scrap yards, and point-sources of water pollution including, but not limited to, water pollution from facilities or combined sewer

overflows. According to third party analysis, the Keasbey Energy Center is not anticipated to increase public health risks.

CPV anticipates that the Keasbey Energy Center will lower the operating hours of less efficient and higher emitting fossil fuel fired electric generation facilities in the PJM and New Jersey. As provided in a separate comment response, CPV anticipates significant reductions in CO_2 and NO_x emissions as a result of the Keasbey Energy Center displacing less efficient and higher emitting fossil fuel fired electric generating stations in New Jersey. Based on the reductions of criteria air pollutants and greenhouse gases per megawatt-hour when comparing the Keasbey Energy Center and the New Jersey average for fossil fuel electric generation, the Keasbey Energy Center would help to offset the statewide emissions of air pollutants from less efficient and higher emitting New Jersey generation sources.

The Keasbey Energy Center will not double existing stressors in the area. For example, the air quality concentrations would not double as a result of the Keasbey Energy Center operation as detailed in the air permit application available at /https://www.cpv.com/wp-content/uploads/2023/01/Keasbey-Energy-Center_PSD-Application_Revised-Section-5_May-2021_FINAL-TO-NJDEP_.pdf.

- Q: Why is more power needed if the area already has enough power?
- A: As previously noted, New Jersey has ambitious electrification goals of both the transportation and building sectors, which will require a significant amount of new energy resources, in addition to the state's existing power generation. The regions grid operator, PJM Interconnection, has also indicated that the region could face energy shortages as early as 2030, without significant new generation entry. <u>https://www.pjm.com/-/media/library/reportsnotices/special-reports/2023/energy-transition-in-pjm-resource-retirements-replacements-andrisks.ashx?bcs-agent-scanner=b82e5acb-39f5-2946-aa69-ab40084c6b3d</u>
- Q: How much green space would be needed to offset the emissions of the Keasbey Energy Center?
- A: The Keasbey Energy Center will have a maximum permit limit of 2.344 million tons of carbon dioxide equivalent per year (CO₂e). The EPA has published a factor for the expected CO₂ offsets from an average US Forest (<u>https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator</u>). Using the EPA's greenhouse gas calculator, the Keasbey Energy Center greenhouse gas emissions would be offset by 2,535,987 acres of forest.
- *Q:* This expansion alone would emit 148 tons of NOx and 51 tons of VOCs.
- A: CPV is seeking an increase to the maximum permitted level of emissions; however, the modification is seeking a maximum combined limit of 291 tons of NO_x and 85 tons of VOCs for both projects on site. The Keasbey Energy Center will have the potential to emit 143 tons of NO_x and 51 tons of VOC. It should be noted that the current operating permit for the Woodbridge Energy Center has a maximum allowable limit of 147.9 tons of NO_x and 33.4 tons of VOCs.

As a condition of the Title V operating permit, CPV will obtain emission offsets, known as creditable emissions reductions (CERs), for the incremental increases of NO_x and VOC at a ratio of 1.3:1.0. An emission offset occurs when a company compensates for an increase in emissions

in one area by decreasing emissions in another area. For example, if a company is expanding, and the expansion will involve an increase in emissions, this company can use CERs to offset the emissions increase. The emission offset requirements include a set tradeoff ratio (i.e., 1.3:1.0) that ensures a continuous decrease in air pollution and an improvement in air quality. When CPV redeems CERs to offset increased pollution levels, the end result is less regional air pollution. Once the CERs are redeemed, the CERs are retired and cannot be used again. As previously discussed in a separate response, CPV anticipates that the Keasbey Energy Center will lower the operating hours of less efficient and higher emitting fossil fuel fired electric generation facilities in the PJM and New Jersey. CPV anticipates significant reductions in CO₂ and NO_x emissions as a result of the Keasbey Energy Center displacing less efficient and higher emitting fossil fuel fired electric generating stations in New Jersey. Based on the reductions of criteria air pollutants and greenhouse gases per megawatt-hour when comparing the Keasbey Energy Center and the New Jersey average for fossil fuel electric generation, the Keasbey Energy Center would help to offset the statewide emissions of air pollutants from less efficient and higher emitting New Jersey generation sources.

- Q: Is CPV using ozone and/or NOx credits for this plant?
- A: A condition of the air permit will require the facility to acquire Creditable Emissions Reductions (CERs) for NO_x and VOC at a ratio of 1.3:1.0.
- *Q:* The decision on this proposal needs to be postponed until after the final DEP regulations take effect.
- A: CPV respects the decision to allow this proposal to move forward under the Administrative Order 2021-25. CPV submitted the original permit application for the facility in 2016. The Administrative Order is available at <u>https://www.nj.gov/dep/ej/docs/njdep-ao-2021-25-</u> <u>faqs.pdf?bcs-agent-scanner=31e7ba59-5228-da49-ab73-dfba02f11f9f</u>.
- *Q:* What good is the environmental justice law if projects like this can still receive approval?
- A: CPV has adhered to the requirements under Administrative Order 2021-25 and is confident the efforts to encourage collaboration and cooperation with the local community, meet the goals of the environmental justice law.
- *Q:* How long will this project impact the area?
- A: The Keasbey Energy Center would have a construction timeline of approximately 30 months, and would be built to provide economic benefit, and serve the energy needs of the local area for decades. As discussed previously in separate response, CPV anticipates that the Keasbey Energy Center will help offset the current emissions from fossil fuel electric generation sources in the PJM and New Jersey.
- *Q*: 100% of the energy from this project will be sold out of state.
- A: The Keasbey Energy Center would be interconnected to the PJM grid. PJM serves as the regional transmission operator for New Jersey as well as 12 other states and Washington, D.C. While the plant does not control exactly where the energy goes, it will serve local demand.

- *Q:* This is an out-of-state, multinational corporation looking to profit with no benefit for New Jersey.
- A: This question is not relevant to the permits sought for the project.
- *Q:* When will the environmental impact statement be complete?
- A: Under Administrative Order 2021-25, an environmental justice impact statement is not required. The Administrative Order is available at <u>https://www.nj.gov/dep/ej/docs/njdep-ao-2021-25-faqs.pdf?bcs-agent-scanner=31e7ba59-5228-da49-ab73-dfba02f11f9f</u>.
- Q: How much additional harmful chemicals will this plant emit into the air?
- A: As presented in the permit modification and during the public information session the application is seeking the following maximum limits for the Keasbey Energy Center. Though the application seeks the maximum limits, the facility may operate at levels below this threshold.

Oxides of Nitrogen (NOx)	Carbon Monoxide (CO)	Particulate Matter (PM2.5)	Sulfur Dioxide (SO2)	Volatile Organic Compounds (VOC)	Hazardous Air Pollutants (HAPs)	Carbon Dioxide (CO2e)
143.2	141.0	99.9	41.0	51.4	6.9	2,361,231

- *Q:* Why did 15 local cities and towns vote against this power plant?
- A: This question is not relevant to the permits sought for the project.
- *Q:* Will there be an extension to the public comment period due to posting errors?
- A: Any posting errors were corrected well before the 30-day minimum posting requirement under the Administrative Order. CPV seeks to meet the posting requirements under Administrative Order 2021-25. The NJDEP announced a new comment period deadline of April 30, 2023, which CPV adhered to. Therefore, CPV does not plan to extend the public comment period.
- *Q:* Why was the notice not also written in Spanish?
- A: CPV provided a Spanish translation of the notice. It is available at https://cpv.com/2023/02/03/aviso-publico-keasbey-energy-center/.
- Q: Will there be a hearing conducted in Spanish?
- A: CPV does not plan to hold an additional Environmental Justice Public Information Session but did provide Spanish translation services through Microsoft Teams during the February 28, 2023 session.

- Q: In what ways has CPV sought the involvement of those potentially affected by the proposed project?
- A: CPV has adhered to all the requirements under Administrative Order 2021-25, which included public notices locally and in newspapers, posting on the CPV website, providing access to application material and conducting a virtual public information session. CPV is also present in the community and always welcomes feedback from our neighbors and residents of Woodbridge on our existing facility and the proposed project.
- *Q:* Are you planning to have in-person hearings in the community? Will they be held in Spanish?
- A: CPV is not planning to hold additional in-person sessions related to the requirements under the Environmental Justice rules; however, the Title V process will require additional hearings.
- Q: The environmental justice law states that the applicant shall publish notice of the hearing in at least two newspapers, including one local non-English newspaper. Was this done?
- A: CPV adhered to guidance from the NJDEP and the Administrative Order and published notice of the hearing in the Courier News Tribune.
- *Q:* Did CPV provide relevant information related to facility wide impacts with the overburdened community?
- A: CPV provided copies of the permit application at the Woodbridge Town Hall, on its website, and free to anyone who asked the company for copies.
- Q: What are the health impacts of adding 149 tons of NOx, 124 tons of particulate matter, 49.9 tons of volatile organic compounds, formaldehyde, lead, 2.3 million tons of greenhouse gases, 2.292 tons of CO, and additional tons of ammonia, sulfur dioxide, sulfuric acid? Have studies been done on this?
- A: It should be noted that the proposed Keasbey Energy Facility is not projected to add those levels of emissions. As noted previously, the permit modification is seeking the following maximum permit limits for the proposed Keasbey Energy Center.

Oxides of Nitrogen (NOx)	Carbon Monoxide (CO)	Particulate Matter (PM2.5)	Sulfur Dioxide (SO2)	Volatile Organic Compounds (VOC)	Hazardous Air Pollutants (HAPs)	Carbon Dioxide (CO2e)
143.2	141.0	99.9	41.0	51.4	6.9	2,361,231

According to the EPA, burning fossil fuels at power plants creates emissions of sulfur dioxide (SO_2) , nitrogen oxides (NO_X) , particulate matter (PM), volatile organic compounds (VOC), carbon dioxide (CO2), mercury (Hg), and other pollutants. NO_X and VOC emissions contribute to the formation of ground-level ozone and fine PM, which can lead to respiratory and cardiovascular

problems, and exposure to mercury can increase the possibility of health issues ranging from cancer to immune system damage. More available at <u>https://www.epa.gov/power-sector/power-plants-and-neighboring-</u>

communities#:~:text=NOX%20and%20SO2,cancer%20to%20immune%20system%20damage.

Title V permit applications require modeling and analysis that includes impacts to the highest health risk groups, such as the elderly, children and those with pre-existing respiratory illnesses. We have shown through our analysis that the Keasbey Energy Center will not negatively impact these high risk groups. All Federal and New Jersey air quality regulations, including health based ambient air quality standards are set at levels that are deemed protective of high-risk groups, are subject to a comprehensive public involvement process. The NJDEP has excellent and transparent public involvement for rulemakings. Note that air quality standards, which protect high risk groups, are developed by a team of environmental health experts such as medical doctors, biologists, toxicologists, atmospheric scientists, and environmental engineers.

- Q: Why are you building an antiquated, outmoded fossil fuel power plant when the State of New Jersey is currently building and planning for offshore wind?
- A: This question is not relevant to the permits sought for the project.
- Q: Are the highest risk groups taken into account?
- A: Title V permit applications require modeling and analysis that includes impacts to the highest risk groups, such as the elderly, children, and those with pre-existing respiratory illnesses. We have shown through our analysis that the Keasbey Energy Center will not negatively impact these high-risk groups. All Federal and New Jersey air quality regulations, including health based ambient air quality standards are set at levels that are deemed protective of high-risk groups, and are subject to a comprehensive public involvement process. The NJDEP has excellent and transparent public involvement for rulemakings. Note that air quality standards, which protect high risk groups, are developed by a team of environmental health experts such as medical doctors, biologists, toxicologists, atmospheric scientists, and environmental engineers.
- Q: Why is CPV not developing cleaner resources in this area?
- A: It requires approximately 5-10 acres of land to produce 1 megawatt of solar power when the sun is shining. Wind farms also require significant acreage to produce similar levels of power as the proposed project. Large areas of open land are typically available in less urban areas. <u>https://www.seia.org/initiatives/land-use-solar-development</u>. CPV is currently constructing utility-scale solar in Pennsylvania as well as developing other utility-scale renewable energy projects in PJM.
- Q: Why doesn't CPV build a battery farm on the proposed location for the Keasbey Energy Center? Wouldn't that help with the reliability issues?
- A: This question is not relevant to the permits sought for the project.
- *Q:* Do you want to bring the life expectancy of the area down further?

- A: This question is not relevant to the permits sought for the project.
- Q: Which coal and less efficient plants would this project offset?
- A: Third party studies have demonstrated a new state-of-the-art efficient natural gas facility will offset less efficient and high emitting projects in the region. The region is managed by PJM Interconnection, which runs a daily auction that determines the most efficient power plants that will run to meet expected demand on the following day. We are unable to speculate on the specific plants that will not operate or will operate less because of the Keasbey Energy Center, but we are confident that a new facility will lower the operating hours of the least efficient plants in the region. More information on the PJM Interconnection is available at https://www.pjm.com/.
- *Q:* How come you did not mention climate change?
- A: This question is not relevant to the permits sought for the project.
- Q: How can CPV refer to itself as responsible?
- A: This question is not relevant to the permits sought for the project.
- Q: The air quality in Woodbridge is already bad, won't this make it worse?
- A: As noted earlier, the Title V permit modification seeks emission increases from the existing operating permit, but our analysis shows that it will comply with federal and state air quality standards. The modeling analysis included existing offsite major air emission sources that were modeled with the proposed electric generating station and included air quality monitoring data from the existing NJDEP air quality monitoring network. The cumulative air quality modeling analysis demonstrated compliance with ambient air quality standards and was based on worst-case emissions from the Keasbey Energy Center that will be included in the Title V air permit.

As previously discussed in a separate response, CPV anticipates that the Keasbey Energy Center will lower the operating hours of less efficient and higher emitting fossil fuel fired electric generation facilities in the PJM and New Jersey. CPV anticipates significant reductions in CO₂ and NO_x emissions as a result of the Keasbey Energy Center displacing less efficient and higher emitting fossil fuel fired electric generating stations in New Jersey. Based on the reductions of criteria air pollutants and greenhouse gases per megawatt-hour when comparing the Keasbey Energy Center would help to offset the statewide emissions of air pollutants from less efficient and higher emitting New Jersey generation sources.

- *Q:* Will Governor Murphy call on CPV to withdraw this proposal? When will he reject the project?
- A: This question is not relevant to the permits sought for the project.
- *Q:* The permit application was not available at the physical location noted in the posting.

- A: We understand that there were some issues in the first few days of locating the permit copies at Town Hall. Those issues were immediately addressed once discovered. Additionally, CPV posted copies of the permit online and made them available at no cost to anyone who requested a copy.
- *Q:* Why are these projects not built in other counties?
- A: CPV is unable to speculate on why similar projects are not built in other counties but will note that there are natural gas power plants in several counties across the state. Generally, these projects are built close to areas of high energy demand.
- *Q:* Does CPV care about people's health and wellbeing?
- A: This question is not relevant to the permits sought for the project.
- *Q:* What does CPV plan to do in the future to let people know about the proposed plant?
- A: CPV plans to continue to follow guidance from the NJDEP as well as adhere to the requirements set forth under Administrative Order 2021-25, which is available at https://www.nj.gov/dep/ej/docs/njdep-ao-2021-25-faqs.pdf?bcs-agent-scanner=31e7ba59-5228-da49-ab73-dfba02f11f9f.
- Q: What profit goes back to Woodbridge?
- A: In addition to the local and state taxes that the project will pay, CPV contributes directly to local school STEM programs as well as the area's first responders.
- Q: Why does CPV call electricity from natural gas clean?
- A: Electricity from natural gas is not emissions free, but utilizing the most efficient technology available today, modern natural gas power plants are able to significantly reduce emissions over previous generations of coal, oil, and less efficient gas plants.
- *Q:* Why does the project not plan to use biofuels?
- A: The Keasbey Energy Center is planned to run on natural gas. There is not a resource available to the plant that would provide sufficient amounts of biofuels to operate the project.
- Q: Will this plant exceed maximum containment levels for emissions?
- A: The Keasbey Energy Center will adhere to all Title V permit limits for all emissions, which will be regularly monitored and reported to NJDEP and EPA.
- *Q:* Why not invest in rooftop solar instead of natural gas generation?
- A: This question is not relevant to the permits sought for the project.

- Q: One million shellfish died because of extreme heat in Washington and whales are washing ashore in New Jersey. Why do you want to build more plants that will contribute to climate change?
- A: The Keasbey Energy Center will offset older, less efficient, and higher emitting electric generating facilities. These offsets will lower overall greenhouse gas emissions in the region.
- Q: Why don't you build the plant in Braintree, next to your headquarters?
- A: This question is not relevant to the permits sought for the project.
- *Q: CPV is rushing this through the process.*
- A: This question is not relevant to the permits sought for the project.
- Q: What amount of particulate emissions is safe?
- A: CPV follows all state and federal regulations on particulate emissions to ensure compliance with state and federal safety and air quality standards.
- Q: What will this hearing accomplish?
- A: This question is not relevant to the permits sought for the project.
- *Q:* How does this respect the generations of children that will follow us?
- A: At CPV, we strive for a lower carbon future, limiting our carbon footprint and providing for a safe environment for future generations.
- Q: Why is this the only hearing?
- A: CPV has adhered to the requirements under Administrative Order 2021-25, which is available at https://www.nj.gov/dep/ej/docs/njdep-ao-2021-25-faqs.pdf?bcs-agent-scanner=31e7ba59-5228-da49-ab73-dfba02f11f9f
- Q: Will CPV come to New Jersey, breathe the air and provide environmental justice?
- A: This question is not relevant to the permits sought for the project.
- Q: Competitive Power Ventures is 100% owned by a corporation named OPC energy located in Israel.
- A: This comment is not relevant to the permits sought for the project.
- *Q*: No one should be cut off or not allowed to speak at this Environmental Justice session.

- A: CPV willingly extended the environmental justice session to over three and a half hours to accommodate the significant number of participants. By the end of the session, everyone had an opportunity to speak.
- Q: Why did CPV classify the area as rural in its application?
- A: The land use classification is required for the application of the EPA's AERMOD model for calculating the air quality impacts. The determination of rural classification was based on the NJDEP Technical Manual (TM1002) guidance for air modeling protocols and on EPA guidance for application of the AERMOD model. The classification analysis is provided in the Air Quality Modeling Protocol, which was provided to and approved by NJDEP for use in preparing the air permit application modeling analysis.
- Q: Why isn't CPV required to include some renewable energy in the project?
- A: CPV adheres to all state and federal requirements for its project. Currently, there is no requirement to include renewable energy resources in this proposal.
- Q: CPV failed to adequately communicate in layman's terms, the amount and types of various deadly emissions that will be pumped into the air directly affecting the quality of life for the densely populated, already overburdened areas surrounding the proposed site.
- A: As noted in previous responses, CPV has detailed the specific types of emissions from the proposed project as well as the maximum amount requested under the permit modification. CPV has also noted resources through the EPA that can help to further clarify and detail the emissions that come from most power plants. Additional information is available at https://www.epa.gov/power-sector/power-plants-and-neighboring-communities#:~:text=NOX%20and%20SO2,cancer%20to%20immune%20system%20damage.
- Q: The air pollution modeling is not indicative of actually air quality at the location of the proposed project.

CPV prepared a dispersion modeling assessment that included emissions from the Keasbey Energy Center and Woodbridge Energy Center. The modeling analysis assessed impacts within the 10-km radius of the site and included cumulative impacts from other polluting sources within the region and local area. The modeling analysis was conducted with an air quality modeling protocol that was approved by EPA and NJDEP and was based on the latest state of the art models and guidance available. Additional information and specific air quality data is available in the permit modification application at https://www.cpv.com/wpcontent/uploads/2023/01/Keasbey-Energy-Center_PSD-Application_Revised-Section-5_May-2021_FINAL-TO-NJDEP_.pdf.

- Q: The Title V application was not available or unable to be removed from Town Hall. Was there a charge for copies of the application? When was the application material posted to the CPV website?
- A: We understand that there were some issues in the first few days of locating the permit copies at Town Hall. Those issues were immediately addressed once discovered. Additionally, CPV posted copies of the permit online and made printed copies available at no cost to anyone who requested a copy. The initial notice was posted on January 18th and the supporting application material was posted soon after and well before the required 30-day notice period.
- *Q:* When was the air permit submission completed?
- A: The initial air permit was submitted in August of 2016.
- Q: What kind of potential emissions are expected for benzene, formaldehyde, carbon dioxide, and methane?
- A: As noted previously the permit modification is seeking the following maximum permit limits for the proposed project. Benzene and formaldehyde are considered volatile organic compounds and are part of the hazardous air pollutants (HAPs) classification. The emissions of benzene will be limited to less than 0.1 tons per year and the emissions of formaldehyde will be limited to less than 1.8 tons per year.

Oxides of Nitrogen (NOx)	Carbon Monoxide (CO)	Particulate Matter (PM2.5)	Sulfur Dioxide (SO2)	Volatile Organic Compounds (VOC)	Hazardous Air Pollutants (HAPs)	Carbon Dioxide (CO2e)
143.2	141.0	99.9	41.0	51.4	6.9	2,361,231

- *Q:* What does the DEP protocol say about stack height? Is the applicant proposing a stack height that aligns with the DEP protocol?
- A: CPV's Title V application is in accordance with all the requirements of state and federal stack height regulations. The application is available at www.cpv.com/wp-content/uploads/2023/01/FINAL_Keasbey-Energy-Center_PSD-Application_083116_Sections-1-4 <u>Appendices.pdf</u> and at https://www.cpv.com/wp-center_PSD-Application_083116_Sections-1-4 <u>Appendices.pdf</u> and at https://www.cpv.com/wp-content/uploads/2023/01/Keasbey-Energy-Center_PSD-Application_083116_Sections-1-4 <u>Appendices.pdf</u> and at https://www.cpv.com/wp-content/uploads/2023/01/Keasbey-Energy-Center_PSD-Application_Revised-Section-5 <u>Center_PSD-Application_Revised-Section-5 May-2021_FINAL-TO-NJDEP_.pdf.</u>
- Q: How much money has CPV spent on remediation of the area?
- A: This question is not relevant to the permits sought for the project.
- *Q: CPV has been cited for air quality violations.*
- A: CPV self-reported its violations to the NJDEP when they became known in 2019. We have since rectified the issue and are in compliance with NJDEP regulations.

Q: The Keasbey Energy Center will be an additional cost to New Jersey ratepayers.

- A: Unlike power generation in some areas of the country that are owned by utilities whose ratepayers cover the cost to build and operate the facility, New Jersey has a restructured energy market, where private companies, like CPV, take the risk to build and operate power generation facilities. Generation owners bear the risk, and hope to recover their investment through the energy market. If the project were to become a bad investment, the burden remains on the company; ratepayers would not be on the hook.
- Q: What are the quantity and type of emissions that the proposed plant is expected to displace? What are the emissions expected to be generated from the construction of the plant, and how many years of operation is expected for the displaced emissions to break even with the emissions from the construction of the plant? What is the expected lifetime of the plant?
- A highly efficient state-of-the-art natural gas-fired power combined cycle power plant in PJM is expected to displace greenhouse gas and criteria air pollutant emissions from less efficient, older generators. These emissions may include CO₂, NO_x, particulate matter, sulfur dioxide, and VOCs. CPV will adhere to all state and federally mandated emission limits during the construction of the facility.

As previously discussed in a separate response, CPV anticipates that the Keasbey Energy Center will lower the operating hours of less efficient and higher emitting fossil fuel fired electric generation facilities in the PJM and New Jersey. CPV anticipates significant reductions in CO₂ and NO_x emissions as a result of the Keasbey Energy Center displacing less efficient and higher emitting fossil fuel fired electric generating stations in New Jersey. Based on the reductions of criteria air pollutants and greenhouse gases per megawatt-hour when comparing the Keasbey Energy Center would help to offset the statewide emissions of air pollutants from less efficient and higher emitting New Jersey generation sources.

The Keasbey Energy Center will be built and maintained to last for as long as reasonably practicable given advances in technology and the electric grid. CPV is constantly examining ways to improve the facilities that we own and operate to continue their operations well into the future and continue to be a valuable member of the communities we serve.

- Q: This plant would be located in the Ironbound.
- A: There seemed to be some confusion with a few commenters. This project will be located in Keasbey, Woodbridge, NJ.
- Q: Why didn't CPV answer the question of whether the company had any DEP violations, when Charlie Kratovil, Central NJ Food & Water Watch Director, asked you a couple years ago?
- A: CPV self-reported violations to the NJDEP in 2019 and rectified the issues causing those violations.
- Q: Do you agree with the 97% of climate scientists who say it's a scientific fact that burning fossil fuels is causing global warming?

- A: This question is not relevant to the permits sought for the project.
- Q: Are you pushing to get this plant approved before NJ's landmark environmental justice rules take effect?
- A: CPV filed its original air permit application in 2016 and provided updated application material in 2021. Copies of the application material is available at https://www.cpv.com/2023/01/18/public-notice/. The NJDEP environmental justice regulations allow this proposal to move forward under the Administrative Order 2021-25. The Administrative Order is available at https://www.nj.gov/dep/ej/docs/njdep-ao-2021-25-faqs.pdf?bcs-agent-scanner=31e7ba59-5228-da49-ab73-dfba02f11f9f.
- *Q:* What are you doing to mitigate the health risks of nearby residents?
- A: CPV follows federal and state health and safety regulations to mitigate risks to our communities. Additionally, we believe that a state-of-the-art highly efficient natural gas generation facility will offset emissions from older less efficient power plants improving the air quality for the region overall.
- Q: What research are you doing about the risk that has already been posed to nearby residents by the emissions you've released over the last five years?
- A: This question is not relevant to the permits sought for the project.
- *Q:* Will you perform ongoing health impact studies related to the emissions from your plant and make these results public?
- A: CPV will follow all monitoring requirements during construction and operation of the Keasbey Energy Center. During operation, emissions data is regularly collected and publicly available at <u>https://campd.epa.gov/</u> and through the NJDEP via the New Jersey Open Public Records Act (OPRA) at <u>https://www.nj.gov/dep/opra/.</u>
- Q: Woodbridge Energy Center is working with the NJDEP to update health impact analysis as part of your Title V Permit renewal for your first Woodbridge plant, and that preliminary results demonstrate the facility will not cause adverse health impacts. How is this possible, given the large amounts of pollutants you're putting in the air? Will you make these results public? Will you make public the parameters and testing procedures you used to attain these results?
- A: CPV follows all state and federal requirements for testing and reporting of emissions as well as requirements for the Title V modification application. Specific facility data is available through the EPA's Clean Air Markets Program <u>https://campd.epa.gov/</u> and through the NJDEP via the New Jersey Open Public Records Act (OPRA) at <u>https://www.nj.gov/dep/opra/.</u> Additional information specific air quality data is available in our application at <u>https://www.cpv.com/wp-content/uploads/2023/01/Keasbey-Energy-Center_PSD-Application_Revised-Section-5_May-2021_FINAL-TO-NJDEP_.pdf.</u>
- Q: Has CPV done or commissioned any research or collection of data and/or exact statistics regarding emissions from its first power plant, and do you expect the emissions from the second plant to be similar?

- A: CPV follows all state and federal requirements for testing and reporting of emissions. Specific facility data is available through the EPA's Clean Air Markets Program https://campd.epa.gov/ and through the NJDEP via the New Jersey Open Public Records Act (OPRA) at https://campd.epa.gov/ and through the NJDEP via the New Jersey Open Public Records Act (OPRA) at https://www.nj.gov/dep/opra/. Additional information specific air quality data is available in our application at https://www.cpv.com/wp-content/uploads/2023/01/Keasbey-Energy-Center_PSD-Application_Revised-Section-5_May-2021_FINAL-TO-NJDEP">https://www.cpv.com/wp-content/uploads/2023/01/Keasbey-Energy-Center_PSD-Application_Revised-Section-5_May-2021_FINAL-TO-NJDEP .pdf.
- Q: CPV has said the new Woodbridge power plant will be more efficient, such that it will displace less efficient plants and reduce the overall amount of carbon produced from electric generation. What does this mean? Do you mean less efficient plants will be taken offline or go out of business because of your new plant, or in actuality, will your new plant just be adding more emissions to the total emissions (but just in a more efficient way, as you say)?
- A: CPV expects that the addition of the new facility will mean that other less efficient plants will operate less frequently. Third party studies have demonstrated a new state-of-the-art efficient natural gas facility will offset less efficient and high emitting projects in the region. The region is managed by PJM Interconnection, which runs a daily auction that determines the most efficient power plants that will run to meet expected demand on the following day. We are unable to speculate on the specific plants that will not operate or will operate less because of the Keasbey Energy Center, but we are confident that a new facility will lower the operating hours of the least efficient plants in the region. More information on the PJM Interconnection is available at https://www.pjm.com/.
- Q: NJBPU recently concluded that NJ did not need any more energy generation, so why are you building this plant? Has there been a study done showing the power from this plant is necessary?
- A: As noted earlier, New Jersey has ambitious electrification goals for both the transportation and building sectors, which will require a significant amount of new energy resources, in addition to the state's existing power generation. The region's grid operator, PJM Interconnection, has also indicated that the region could face energy shortages as early as 2030, without significant new generation entry. <u>https://www.pjm.com/-/media/library/reports-notices/special-reports/2023/energy-transition-in-pjm-resource-retirements-replacements-and-risks.ashx?bcs-agent-scanner=b82e5acb-39f5-2946-aa69-ab40084c6b3d</u>
- *Q:* Is the plan to keep operating the plant indefinitely, despite Governor Murphy's targets to have zero emissions by 2035?
- A: This question is not relevant to the permits sought for the project.
- Q: What year do you envision the plant being completed under the best of circumstances? Under the worst of circumstances? If Gov. Murphy wants to have 100% clean electricity by 2035, why are you building a plant that has such a limited lifespan?
- A: The development process for a new facility can take several years, but the actual construction can take about 30 months on average. Many factors can contribute to a longer timeline. CPV believes that there is an opportunity to provide efficient and reliable power to the region as New Jersey continues to move to a zero-carbon future.

- Q: You said that natural gas resources are necessary to meet the long duration of extreme weather events, but do you realize that the burning of fossil fuels, like natural gas, is what is causing these extreme weather events in the first place?
- A: CPV is aware that emissions from burning fossil fuels increase greenhouse gases and contributes to climate change. CPV is constantly working towards advancing lower carbon technology to decrease emissions, while providing reliable energy. CPV adheres to all federal and state regulations to ensure the safe operation of our facilities and ensure the safety of the communities where we operate.
- Q: Prior to construction of the second Woodbridge Energy Center, will you conduct a dispersion modeling analysis to evaluate the potential impacts of PM, PM10 and PM2.5 from the project (as you did before the first Woodbridge plant) & assess impacts within a 10-kilometer radius of the site? When you do this analysis, do you include the amount of PM, PM10, & PM2.5 that's already in the air as a result of your first plant & other polluting industries in the area because this is what residents are subject to (not just the amount of new pollutants)?
- A: CPV follows all state and federal requirements for testing and reporting of emissions as well as requirements for the Title V modification application. CPV has followed EPA guidelines on air quality models relative to dispersion. The EPA guidelines are available at https://www.epa.gov/sites/production/files/2020-09/documents/appw_17.pdf. Specific facility data is available through the EPA's Clean Air Markets Program https://campd.epa.gov/ and through the NJDEP via the New Jersey Open Public Records Act (OPRA) at https://www.nj.gov/dep/opra/.

CPV prepared a dispersion modeling assessment that included particulate matter emissions from the Keasbey Energy Center and Woodbridge Energy Center. The modeling analysis assessed impacts within the 10-km radius of the site and included cumulative impacts from other polluting sources within the region and local area. Additional information and specific air quality data is available in the permit modification application at https://www.cpv.com/wpcontent/uploads/2023/01/Keasbey-Energy-Center_PSD-Application_Revised-Section-5_May-2021_FINAL-TO-NJDEP_.pdf.

- Q: You said Woodbridge Energy Center is an electric power provider not a developer or constructor; however, CPV's website brags that you're a leader in sustainable wind and solar projects, so have you looked at putting solar panels on top of the many housing and commercial complexes in Woodbridge?
- A: CPV develops wind and solar projects; however, we do not develop rooftop solar projects.
- Q: Even though you say your emissions meet DEP requirements, do you realize you're contributing to global warming and causing negative health effects in residents living near your facilities?
- A: CPV is constantly working towards advancing lower carbon technology to decrease emissions, while providing reliable energy. CPV adheres to all federal and state regulations to ensure the safe operation of our facilities and ensure the safety of the communities where we operate.

- Q: What does that mean/please explain what it means that CPV purchases credits for your emissions from cap-and-trade programs like the Regional Greenhouse Gas Initiative (RGGI)?
- A: CPV participates in RGGI in the states that are part of the initiative. Essentially, CPV, like other fossil fuel generators, purchase a declining number of emissions credits annually to meet the compliance obligation of the state.

According to RGGI.org "the Regional Greenhouse Gas Initiative (RGGI) is a cooperative, marketbased effort among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Virginia to cap and reduce CO₂ emissions from the power sector. It represents the first cap-and-invest regional initiative implemented in the United States."

"RGGI is composed of individual CO₂ Budget Trading Programs in each participating state. Through independent regulations, based on the RGGI Model Rule, each state's CO₂ Budget Trading Program limits emissions of CO₂ from electric power plants, issues CO₂ allowances and establishes participation in regional CO₂ allowance auctions." More information is available at www.rggi.org.

- Q: Are you familiar with any studies that deal with the carcinogenic risks of atmospheric VOCs or have you conducted any independent research on this?
- A: CPV has not conducted independent research on the risks of VOCs, however we are aware of some studies and data through the EPA and NJDEP which are available at https://www.epa.gov/AirToxScreen/airtoxscreen-frequent-questions and https://dep.nj.gov/airplanning/airtoxics/njdep-air-toxics-program/#1611784711508-5ca75f81-855e.
- Q: In CPV's evaluation of organic HAPs that could potentially be emitted from the proposed plant and be a potential health risk to the public beyond the property line, did you take into account the amount of HAPs already in the atmosphere, such that you're evaluating the total and cumulative amount of HAPs on residents?
- A: CPV adheres to all federal and state Title V requirements for measuring health risks beyond the property line of the proposed project. CPV prepared a health risk assessment based on the NJDEP health risk assessment guidance and regulations provided in NJDEP Technical Manual 1003 Guidance for Preparing a Risk Assessment for Air Contaminant Emissions, which is available at https://dep.nj.gov/wp-content/uploads/boss/technical-manuals/1003.pdf. Additional information and specific air quality data is available in the permit modification application at https://www.cpv.com/wp-content/uploads/2023/01/Keasbey-Energy-Center_PSD-Application_Revised-Section-5_May-2021_FINAL-TO-NJDEP_.pdf.
- Q: Are there any studies being done on the increased incidence of various types of cancers in the area?
- A: CPV is not aware of any studies on the cancer rates in the local community.
- *Q:* Have you done any research on the health effects of your emissions from this second plant on nearby residents?

A: As previously mentioned, according to the EPA, burning fossil fuels at power plants creates emissions of sulfur dioxide (SO₂), nitrogen oxides (NO_x), volatile organic compounds (VOC), particulate matter (PM), carbon dioxide (CO₂), mercury (Hg), and other pollutants. NO_x and VOC emissions contribute to the formation of ground-level ozone and fine PM, which can lead to respiratory and cardiovascular problems, and exposure to mercury can increase the possibility of health issues ranging from cancer to immune system damage. More available at https://www.epa.gov/power-sector/power-plants-and-neighboringcommunities#:~:text=NOX%20and%20SO2,cancer%20to%20immune%20system%20damage.

CPV adheres to all federal and state Title V requirements for measuring health risks beyond the property line of the proposed project. CPV prepared a health risk assessment based on the NJDEP health risk assessment guidance and regulations provided in NJDEP Technical Manual 1003 – Guidance for Preparing a Risk Assessment for Air Contaminant Emissions, which is available at https://dep.nj.gov/wp-content/uploads/boss/technical-manuals/1003.pdf. Additional information and specific air quality data is available in the permit modification application at https://www.cpv.com/wp-content/uploads/2023/01/Keasbey-Energy-Center_PSD-Application Revised-Section-5_May-2021_FINAL-TO-NJDEP_.pdf.

- *Q:* Will you make public the data on the air quality around your plant?
- A: CPV follows all state and federal requirements for testing and reporting of emissions. Specific facility data is available through the EPA's Clean Air Markets Program https://campd.epa.gov/ and through the NJDEP via the New Jersey Open Public Records Act (OPRA) at https://campd.epa.gov/ and through the NJDEP via the New Jersey Open Public Records Act (OPRA) at https://campd.epa.gov/ and through the NJDEP via the New Jersey Open Public Records Act (OPRA) at https://www.nj.gov/dep/opra/. Additional information specific air quality data is available in our application at https://www.cpv.com/wp-content/uploads/2023/01/Keasbey-Energy-Center_PSD-Application Revised-Section-5_May-2021_FINAL-TO-NJDEP">https://www.cpv.com/wp-content/uploads/2023/01/Keasbey-Energy-Center_PSD-Application Revised-Section-5_May-2021_FINAL-TO-NJDEP .pdf.
- *Q:* What responsibility is CPV taking for the well-being of school-aged children who may be impacted by the emissions from your plant?
- A: CPV cares about the well-being of school-aged children, especially those in the communities that we serve who may be the children of the plant staff. As per our permit, we constantly monitor and report on our emissions and follow the latest EPA and state guidelines to ensure the safety of our communities and those in the community at the highest risk.
- Q: Do you know there are over 200 public schools within a 10-mile radius of your proposed second plant?
- A: This question is not relevant to the permits sought for the project.
- *Q:* How can people speak out if they have not even been notified about your plan?
- A: CPV has adhered to all noticing requirements under Administrative Order 2021-25, which is available at https://www.nj.gov/dep/ej/docs/njdep-ao-2021-25-faqs.pdf?bcs-agent-scanner=31e7ba59-5228-da49-ab73-dfba02f11f9f.
- Q: Why haven't you at least sent letters of notification to the residents living in Keasbey and Woodbridge?

- A: CPV has adhered to all noticing requirements under Administrative Order 2021-25, which is available at https://www.nj.gov/dep/ej/docs/njdep-ao-2021-25-faqs.pdf?bcs-agent-scanner=31e7ba59-5228-da49-ab73-dfba02f11f9f.
- *Q:* Why aren't you shouting from the rooftops about all the new jobs you will create and the hundreds of potholes you will fix by building another power plant?
- A: This question is not relevant to the permits sought for the project.