



**BOROUGH OF ALPINE**

**Resolution**

**Opposing Construction of the NJ Transit Gas-Fired Power Plant in Kearny**

**OFFERED BY:** Councilwoman Frankel **SECONDED BY:** Councilman Shadok

at a regular meeting of the Mayor and Council of the Borough of Alpine, held on Wednesday, June 24, 2020.

**WHEREAS**, NJ Transit has proposed to build a 140 megawatt gas-fired power plant (aka NJ TRANSITGRID Traction Power System) along the Hackensack River in Kearny, NJ; and

**WHEREAS**, this gas-fired power plant would be paid for using \$546 million of taxpayer-provided federal and state funding, including a \$410 million federal grant for Hurricane Sandy Recovery and Resiliency; and

**WHEREAS**, the Mayor and Council of the Borough of Alpine has a principal responsibility to protect the health and safety of its residents, businesses, and institutions; and

**WHEREAS**, the proposed NJ TRANSITGRID gas-fired power plant would be another long-term source of harmful air pollution directly impacting North Jersey residents; and

**WHEREAS**, gas infrastructure facilities can annually emit into the air hundreds of tons of pollutants including particulate matter, toxic chemicals such as sulfur dioxide, mercury, and criteria pollutants (such as nitrogen oxides which contribute to the formation of acid rain, ozone, and smog), [1] some of which are known carcinogens such as benzene and formaldehyde, and also can be sources of radioactive contamination [2] and are known to increase the severity of asthma and other respiratory diseases; and

**WHEREAS**, particulate matter, once inhaled, can affect the heart and lungs and cause serious health effects, including lung cancer; with long-term exposure to ozone being linked to aggravation of asthma, emphysema, and chronic bronchitis, and likely to be one of many causes of asthma development; with long-term exposures to ozone being linked to permanent lung damage, such as abnormal lung development in children; with both ozone and particulate pollutants being linked to premature death, cardiovascular harm, and increased susceptibility to infections; with recent studies linking air pollution to increases in obesity, diabetes, Parkinson's disease, Alzheimer's and other forms of dementia, and stroke; [3] and with the people most at risk from breathing air that contains ozone including those with asthma, children, older adults, and those who are active outdoors, especially outdoor workers; and

**WHEREAS**, a new study conducted by scientists at Harvard University found that communities with unhealthy levels of particulate matter pollution (pm 2.5) were more likely to die from COVID-19 than other communities,

**WHEREAS**, people who live or work in close proximity to natural gas infrastructure facilities such as power plants and compressors are most at risk, particularly developing fetuses, children, older adults, and those with cardiovascular, lung, or respiratory problems and other vulnerable subpopulations, although under certain weather and terrain conditions, these pollutants can have a wider impact; and

**WHEREAS**, current protocols used for assessing compliance with ambient air quality standards do not adequately determine intensity, frequency, or duration of actual human exposures to pollutants and mixtures of pollutants emitted from natural gas infrastructure, noting that periodic 24-hour average measures can underestimate actual exposures by an order of magnitude; and

**WHEREAS**, based on the American Lung Association's State of the Air 2019" report, North Jersey, which will be most impacted by emissions from this power plant, already has significant populations (in some cases the largest in New Jersey), with pediatric and adult asthma, COPD, lung cancer, cardiovascular disease and diabetes, [4] whose conditions will only be exacerbated by additional volumes of air pollution; and

**WHEREAS**, developing fetuses and children are uniquely vulnerable to exposures as they receive proportionally greater doses of pollutants than adults and have immature organs and detoxification systems [5]; and

**WHEREAS**, peer-reviewed scientific studies [6] link exposure from air pollutants emitted by natural gas infrastructure facilities with neurological, cardiovascular, and respiratory disease, cancer, birth defects, and other adverse health impacts; with acute health impacts from these toxic exposures able to cause burning eyes, headaches, breathing difficulty and nausea for nearby populations and can exacerbate health problems; and with chronic health impacts that can include certain types of cancer as well as damage to lungs, liver, kidneys, reproductive, nervous, and cardiovascular systems; and

**WHEREAS**, the American Medical Association acknowledges the hazards of natural gas infrastructure and associated adverse health impacts; and

**WHEREAS**, Bergen, Hudson, and Essex Counties (the proposed site of the gas-fired power plant being Kearny) already receive grades of 'F' from the American Lung Association for ground level ozone pollution, [7]

**WHEREAS**, the annual health impacts of burning 1 (one) billion cubic feet per day of natural gas in the NY/NJ metropolitan area are estimated to be as follows [8] ; and

Health Impact	Incidents per Year	Societal Value*	Direct Medical and Other Costs
Premature Mortality	35.3	\$238,712,000	\$10,585,000
Chronic Bronchitis	22.3	\$10,544,000	\$2,700,000
Hospital +Emergency Room Visits	32.8	\$432,000	\$345,000
Asthma Attacks	724.5	\$43,000	\$42,000
Respiratory Symptoms	32,720	\$1,190,000	\$1,190,000
Work Loss Days	6,374	\$1,160,000	\$1,079,000
Mercury Related	NA	\$12,277,000	\$13,277,000
Total		\$265,369,000	\$29,217,000

\*Costs to consumers for which they are not reimbursed.

**WHEREAS**, the NJ TRANSITGRID gas-fired power plant would become the 13th largest emitter of greenhouse gases in New Jersey, releasing 5,771,000 tons of Carbon Dioxide Equivalent greenhouse gases into the atmosphere annually [9]; and

**WHEREAS**, the primary ingredient of natural gas is methane, which leaks at every system stage of production, including extraction, processing, transmission, distribution, and final consumption; and

**WHEREAS**, methane is an extremely potent greenhouse gas with a global warming potential that is 34 times that of carbon dioxide over a 100-year timeframe and 86 times that of carbon dioxide over a 20-year timeframe; and

**WHEREAS**, methane emissions from gas-fired power plants may be considerably higher than previously thought, with a 2017 study [10] finding that gas-fired power plants released more than 20 times more methane than the facilities had estimated; and

**WHEREAS**, NJ Transit has never seriously explored alternative solutions to its proposed gas-fired power plant, including zero-emissions technologies like solar, wind, or tidal energy combined with battery energy storage, each of which, or in combination, would avoid the environmental and public health issues detailed in this resolution while still providing new jobs and other financial benefits to local municipalities; and

**WHEREAS**, NJ Transit's failure to seriously evaluate clean energy alternatives is in direct contradiction with several New Jersey laws and policies, including the state's Clean Air Act, 2018 Clean Energy Act, and final 2019 Energy Master Plan to achieve 100% clean energy economy wide in New Jersey by 2050; and

**WHEREAS**, natural gas is becoming less attractive as an energy source due to the rapidly improving cost-effectiveness of renewable technologies, the impact of fossil fuels on our climate emergency (and the need to immediately make deep reductions, not increases, in greenhouse gas emissions,) and the increasing likelihood of fossil fuel infrastructures becoming stranded assets over their expected lifetime, it is likely that the long-term economics associated with NJ Transit's microgrid favor a renewable energy technology-based solution; and

**WHEREAS**, the air pollution from the power plant would disproportionately harm communities of color and low-income communities in Kearny, Newark and Jersey City, in direct contradiction with Governor Murphy's Executive Order 23 to promote environmental justice for all; and

**WHEREAS**, the proposed plant would be built on top of a Superfund site and the former Koppers Seaboard Coke and By-Products plant as well as in an active flood plain that is at risk for at least one flood over 6 feet taking place between 2020 and 2050; and,

**WHEREAS**, the location of the plant conflicts with the Regional Plan Association's 2017 finding of the Meadowlands being at risk from sea level rise; and

**WHEREAS**, geological changes along the East Coast are causing land to sink along the seaboard, which is exacerbating the flood-inducing effects of sea level rise, which has been occurring faster in the western Atlantic Ocean than elsewhere in recent years; with a 2016 article in Scientific American[11] reporting that Sandy Hook is sinking at the rate of over one inch per decade while the regional sea level is rising at over three inches per decade; and

**WHEREAS**, the proposed gas-fired power plant would require 1.3 million gallons of water per day which would come from the municipal water system (Suez), with about 90% of this water to be used to cool the steam-driven turbines; with cooling towers to be used for evaporation, which would allow chemicals in the water to contribute to the existing levels of air pollution; and

**WHEREAS**, the proposed gas-fired power plant's requirement that chemicals such as ammonia, bleach and acids be delivered by trucks and stored on-site would increase the potential for spills into nearby wetlands and streams, and the Hackensack river; and

**WHEREAS**, the operation of the proposed gas-fired power plant would increase the volume of fracked natural gas used in New Jersey, which also would increase the drilling and associated environmentally-destructive activities associated with its production and transport[12] in the region; and

**WHEREAS**, Hurricane Sandy Recovery and Resiliency funding would be used to pay for a gas-fired power plant that would increase greenhouse gas emissions, thus increasing the likelihood of more Sandy-like hurricanes, when New Jersey and its governor should be taking every action possible to safeguard our climate future; and

**WHEREAS**, the 140 megawatts that NJ Transit states is required to power its microgrid project, including driving trains 24/7, can be achieved by the cleaner alternative of one or more renewable energy systems at the proposed Kearney site and on other NJ Transit property (solar, wind, tidal), along with one or more energy storage systems (batteries, flywheels, supercapacitors); and

**WHEREAS**, New Jersey's Clean Energy Law, Public Law 2018 establishes one of the most ambitious renewable energy standards in the country by requiring that 21 percent of the energy sold in the state be from Class I renewable energy sources by 2020; 35 percent by 2025 and 50 percent by 2030; and codifies the Governor's goal of achieving 600 megawatts of energy storage by 2021 and 2,000 megawatts by 2030; and

**WHEREAS**, Governor Murphy should direct federal grants and relief funds towards energy solutions that will help achieve New Jersey's renewable energy and energy storage goals; and,

**WHEREAS**, NJ Transit has the opportunity to become a nationwide leader in both renewable energy and environmentally beneficial transit solutions, it is incumbent upon the agency to make every effort to adopt renewable energy and energy storage to power the NJ TRANSITGRID project.

**WHEREAS**, the microgrid would fail if the gas-fired power plant was severely damaged or forced to shut down by an extreme weather event but the use of renewable energy and energy storage would greatly reduce the probability of a single point of failure jeopardizing the microgrid; and, powered by

**WHEREAS**, powering the microgrid project with renewable energy and energy storage would largely eliminate the need for NJ Transit to purchase natural gas or power from the main electrical grid; and

**THEREFORE**, be it resolved that the Mayor and Council of the Borough of Alpine in the interest of protecting its residents, businesses and institutions, as of June 24, 2020 strongly opposes the use of a gas-fired power plant to supply electricity for the NJ TRANSITGRID Traction Power System microgrid; and

**BE IT FURTHER RESOLVED** that the Borough of Alpine supports a renewable energy (solar, tidal, wind) and energy storage system (battery, flywheel) in the place of a gas-fired power plant; and

**BE IT FURTHER RESOLVED** that the Borough of Alpine urges Governor Murphy to direct NJ Transit to immediately undertake a comprehensive engineering and economic analysis of the use of various renewable energy and storage technologies to power its Traction Power System microgrid and report back to the Governor and the public on the results of this analysis before it proceeds with bids to construct the system; and

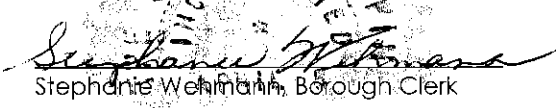
**BE IT FURTHER RESOLVED**, that the Municipal Clerk shall forward this Resolution to:

- New Jersey Governor Phil Murphy - <https://www.nj.gov/governor/contact/>
- NJ Department of Environmental Protection Commissioner Catherine McCabe - [Catherine.McCabe@dep.nj.gov](mailto:Catherine.McCabe@dep.nj.gov)
- State Senator Brian P. Stack - [SenStack@NJleg.org](mailto:SenStack@NJleg.org)
- State Assemblyperson Annette Chaparro - [AswChaparro@njleg.org](mailto:AswChaparro@njleg.org)
- State Assemblyperson Raj Mukherji - [AsmMukherji@NJleg.org](mailto:AsmMukherji@NJleg.org)
- Food & Water Watch - [sdifaico@fwwatch.org](mailto:sdifaico@fwwatch.org)
- Hudson, Bergen, and Essex County Freeholders and Administration
  - o Essex - [ddavisford@freeholders.essexcountynj.org](mailto:ddavisford@freeholders.essexcountynj.org)
  - o Bergen - [mamoroso@co.bergen.nj.us](mailto:mamoroso@co.bergen.nj.us)
  - o Hudson - [asantos@hcnj.us](mailto:asantos@hcnj.us)
- League of New Jersey Municipalities, 222 West State Street, Trenton, NJ 08608
- The Bergen Record - [Fallon@northjersey.com](mailto:Fallon@northjersey.com)

**Vote: Ayes:** Cacouris, Frankel, A., Frankel, V., Gerstein, Shadek **Absent:** Halbreich

**MOTION APPROVED**

I hereby certify this to be true copy of a Resolution passed at the Mayor and Council meeting of the Borough of Alpine held on Wednesday, June 24, 2020.

  
Stephanie Wehmann, Borough Clerk

[1] Criteria Air Pollutants (CAP), or criteria pollutants, are a set of air pollutants that cause smog, acid rain, and other health hazards. CAPs are typically emitted from many sources in industry, mining, transportation, electricity generation, and agriculture. In many cases they are the products of the combustion of fossil fuels or industrial processes.

[2] Environmental Health Project Report, October 2017: Health Effects Associated with Stack Chemical Emissions from NYS Natural Gas Compressor Stations: 2008-2014

<https://www.environmentalhealthproject.org/sites/default/files/assets/resources/health-effects-associated-with-stack-chemical-emissions-from-nys-natural-gas.pdf>

[3] <https://www.sciencenews.org/article/list-diseases-linked-air-pollution-growing>

[4] Numbers of residents in 2017 in each county with the diseases shown:

County	Pediatric Asthma	Adult Asthma	COPD	Lung Cancer	Cardiovascular Disease	Diabetes	Poverty Estimate
Bergen	16,376*	61,021*	47,586*	525*	62,375*	70,715*	63,789
Hudson	11,286	44,533	29,582	379	36,091	40,122	104,660

\*Highest volume in New Jersey

[5] Reducing the staggering costs of environmental disease in children, estimated at \$76.6 billion in 2008, Trasande, L, et al, Health Affairs, May 2011: <https://www.ncbi.nlm.nih.gov/pubmed/21543421>

[6] PSE for Healthy Energy Repository for Oil and Gas Energy Research <https://www.psehealthyenergy.org/our-work/shale-gas-research-library/>

[7] American Lung Association's 2019 State of the Air report, page 124

<http://www.stateoftheair.org/assets/sota-2019-full.pdf> Shows Hudson and Bergen Counties with grade of F for high ozone days.

[8] <https://www.sierraclub.org/sites/www.sierraclub.org/files/sce-authors/u1997/HCWH%20pipeline%20health%20impacts.pdf>

[9] <https://www.northjersey.com/story/news/environment/2019/06/21/nj-transit-wants-build-power-plant-meadowlands-kearny-amtrak/1509679001/>

[10] <https://www.desmogblog.com/2017/03/20/natural-gas-power-plants-fracking-methane>

[11] <https://www.scientificamerican.com/article/sinking-atlantic-coastline-meets-rapidly-rising-seas/>

[12] Concerned Health Professionals of New York/Physicians for Social Responsibility, Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking (Unconventional Gas and Oil Extraction), 6th Edition, June 2019

<https://www.psr.org/wp-content/uploads/2019/06/compendium-6.pdf>