

Frequently Asked Questions about the NJ TRANSITGRID Project

Don't Gas the Meadowlands Coalition

1. What is the NJ TRANSITGRID project and why is it being built?

The NJ TRANSITGRID project is a public transportation resiliency initiative designed in response to Hurricane Sandy, which left critical sections of NJ Transit's rail line without power for several days. NJ Transit plans to build an electrical microgrid that can operate separately from the commercial power grid to provide power to trains and associated infrastructure for up to two weeks if the commercial grid is down. Under the current proposal from Governor Murphy's NJ Transit, the micro-grid would be powered by a gas-fired plant proposed to be built in Kearny.

2. Where is it going to be located?

The microgrid would power sections of railway in North Jersey along the Northeast Corridor line, the Morris & Essex line, and the Hudson-Bergen Light Rail. The gas power plant would be located along the Hackensack River in Kearny on the Koppers Coke Peninsula, a former coke distillation plant that stopped operation in 1970. This area is now a superfund site with a thin cap that covers toxic materials which could be disturbed and leach into the river during construction activities.

The power plant site sits less than .75 miles upwind from residences in the Jersey City Heights, less than one mile upwind from Hudson County School of Technology, and less than two miles upwind from Secaucus and Hoboken. Within two miles in the other direction lies the east ward of Newark.

3. What power generating system will this power plant use?

The TRANSITGRID power plant would burn large quantities of natural gas 24/7.

4. What problems will the TRANSITGRID Power Plant cause for residents of NJ in the areas near the power plant and across NJ?

The plant would operate in an area of Hudson County that is already struggling with significant air pollution. The power plant would release large quantities of harmful pollutants including particulate matter (soot) and nitrogen oxides, which combine with sunlight to form dangerous ground level ozone (smog). This region already has a failing grade from the American Lung Association for exceedingly high levels of ground-level ozone. There are major residential areas within 2 miles of the power plant with populations that already suffer from pediatric and adult asthma, COPD, and lung cancer. These health conditions will only be exacerbated by the additional air pollution from a major gas power plant. Ozone is a known carcinogen and has been proven statistically to cause premature deaths, especially in vulnerable populations such as

the elderly and people with compromised health. This would create serious cumulative public health, environmental and economic impacts for the surrounding communities, especially for low income communities of color in Kearny, Newark and Jersey City Heights, who already suffer from a disproportionate pollution burden. Simply put, if this plant is built, people will die.

5. Why will the NJ Transit Power Plant burn fracked gas 24/7 if the TRANSITGRID is only to provide power when the commercial grid is down?

The stated purpose of the TRANSITGRID Power Plant is to provide a reliable source of backup power to critical portions of rail lines at times when the commercial grid is down. However, in order to recover the costs of the microgrid the power plant will burn fracked gas day and night even when the commercial grid is up and running in order to power some trains 24x7 and produce additional power for sale back to the grid.

6. Has NJ Transit considered other fuels/systems and, if so, what factors have driven its decision?

New Jersey Transit has never seriously explored alternative solutions to their proposed gas-fired power plant. NJ Transit started planning for this project in 2013 and had Sandia Labs perform a feasibility study in 2014. At that time solar and battery storage technologies were not as powerful or cost competitive versus gas as they are now and were not considered. As a result, they never changed their thinking and now, 6 years later, they have still not analyzed the latest zero emissions technologies such as solar panels, wind and tidal power, which could be combined with advanced energy storage systems to avoid the environmental and public health issues detailed above, while still providing new jobs and other financial benefits to New Jersey residents and workers.

In NJT's Draft Environmental Impact Statement (DEIS), Published May 2019, they present two alternatives. One is the Build Alternative, which encompasses the microgrid, powerplant, and natural gas pipeline attachment, and the second is the No Action Alternative, which is no microgrid and continued reliance on the commercial grid.

In the DEIS, NJ Transit states that solar panels, wind energy, and other "green" technologies to fully "island" the NJ TRANSIT and Amtrak electrical systems from the larger commercial power grid are not practical or reasonable alternatives to a natural gas-fired power plant due to the required load generation capacity, siting requirements for these technologies, the need to meet rapidly fluctuating loads associated with traction power systems under island conditions (especially due to the need for energy storage to guarantee a reliable power source), and the cost. However, NJ Transit does not claim to have conducted an in depth analysis of renewable technology options and provided no evidence to support any of these assertions.

In recent meetings NJ Transit has expressed more willingness to look at renewables but has no plans to commission its own study and is still planning to request bids for a gas fired plant.

7. How much will this system increase greenhouse gas emissions in NJ?

The TRANSITGRID project would result in an annual additional 576,757 tons of greenhouse gas emissions in NJ. This number does not include potential methane leakage into the atmosphere. Methane is the primary component of natural gas, and is an 86 times more potent greenhouse gas than CO₂, and worse for climate change than burning coal. NJ Transit states that the accidental release of methane would be a rare occurrence, but methane is found to leak at every stage of natural gas extraction, transportation and operation.

8. How has NJ Transit rationalized this increase in greenhouse gases?

Even though the TRANSITGRID power plant will emit nearly 577,000 tons of GHGs annually, NJ Transit suggest new additional emissions are acceptable because other sources of GHGs in NJ will likely decrease their emissions, as more coal-fired plants convert to using natural gas as the primary fuel, and as more electric generation capacity is converted to renewable energy sources. However, as it stands now, the two remaining coal-fired power plants in NJ (which will be closing soon) produce only 1.6 percent of New Jersey's electricity, and no existing gas-fired power plants have released any plans to convert to renewables.

NJ Transit also has stated that their new power plant would only be responsible for 3.3% of greenhouse gas emissions in NJ, 0.00953% of total emissions of the United States, and 0.00141% of world GHG emissions. NJ Transit argues that this percent of emissions is negligible in comparison to the rest of the world. We are at a point where no greenhouse gas emissions are negligible! The Intergovernmental Panel on Climate Change 2018 special report on global warming stated that in order to avoid the most disastrous consequences of climate change, we need to cut emissions by at least 45% from 2010 levels by 2030, reaching zero emissions by 2050. There is no longer any way to rationalize any increase in greenhouse gas emissions.

9. What are the other significant environmental risks and impacts?

Constructing and operating a new power plant in the region also risks further damage to the surrounding wetlands ecosystem. Wetlands serve many functions benefiting the human and natural environment; they are a natural filtration system, purifying the water we drink and use in daily life. They also preserve biodiversity by hosting a number of plant and animal species, and they play a crucial role in climate change mitigation by absorbing storm waters, protecting residential communities in nearby flood zones. The construction of, and pollution from the proposed plant could affect the quality and

quantity of water flows, thereby harming the delicate animal and plant habitats in the wetlands and undermining their critical hydrological functions. Any damage to vegetation or soil from heavy machinery could also reduce the water retention capacity of the wetlands and increase runoff.

10. How significant is a renewable energy/storage rail project in terms of innovative uses of technology?

Many new state of the art transit systems have opted to invest in renewable energy and battery storage to power their railways as the cost of fossil fuels goes up, and concern for our environment, health, and climate grows. This project is different from projects in other countries using solar to power trains because it must be able to operate without any support from commercial power for weeks at a time. This has never been done anywhere in the world using renewable energy technology and storage. While there are many unique engineering and other challenges involved, we are confident this can be accomplished technically and it would be a landmark event for New Jersey and transportation systems around the world.

11. How is this project being funded?

The Transitgrid project is being funded by \$546.3 million in taxpayer dollars (\$410M from a Federal Transportation Administration grant and \$136M from the New Jersey State Transportation Trust Fund). Governor Murphy should be insisting this immense amount of federal money be spent on a project utilizing renewable energy and battery storage to meet the goals he laid out in his Energy Master Plan for 100% renewable energy by 2050 and to protect New Jersey's health and environment.

12. How do the costs of renewable energy technologies and storage fit with NJ Transit's plan?

The cost of solar power, storage and other renewable energy sources is rapidly decreasing, while the cost of natural gas and other fossil fuels has nowhere to go but up. Long term, it will be more economical for New Jersey to invest in modern renewable energy technology.

13. Is there still time to pursue a renewable alternative?

Yes. New Jersey Transit has not yet put the project out to bid and said it is willing to consider renewable energy proposals but they will have unique challenges not faced by those proposing gas power plants. New Jersey Transit is not going to study the viability of renewable itself and there is no guarantee they will select a renewable energy solution. However, if Governor Murphy orders NJ Transit to fully analyze renewable energy alternatives and further orders them to use every effort to find and adopt a viable renewable energy solution, then NJ residents will have access to one of the world's

leading renewable powered railways, without any ill effects to their communities caused by increased greenhouse gases and smog.

14. How would a renewable alternative affect job creation?

The fossil fuel industry claims that shifting to renewable energy would cost jobs and hurt the economy, but the reality is that twice as many New Jerseyans already work in the renewable energy and energy efficiency sector than in fossil fuels. Shifting to 100 percent renewable energy like wind and solar and investing in energy efficiency upgrades would supercharge the clean energy sector and provide even more jobs. According to the U.S. bureau of labor statistics, solar installers and wind turbine technicians are among the top two fastest-growing occupations in the country. Transitioning to renewable energy protects the environment, curbs climate change and provides safer and long term employment for New Jersey workers.

15. How does this project fit within the spirit and objectives of NJ's new Energy Master Plan?

NJ's new Energy Master Plan, released on January 27, 2020, calls for 50% clean energy by 2030, and 100% clean energy by 2050. Some key strategies to reach these emissions cuts include, expanding use of electric vehicles, growing the renewable energy sector, and strengthening energy efficiency standards.

It is completely hypocritical on the part of Governor Murphy to permit NJ Transit, which sits under his own agency, to build more fossil fuel infrastructure, designed to run for decades, when his Energy Master Plan for New Jersey has a stated goal of 100% clean energy by 2050. Rather, Governor Murphy should be directing this immense amount of federal money towards renewable energy and battery storage to meet his own environmental goals, and to protect New Jersey's health and environment.

Even more pointedly, his failure thus far to direct NJ Transit to develop a renewable and battery storage alternative to the fracked gas plant, when his Energy Master Plan calls for 2,000 MW of energy storage by 2030, and when we have over 400 Million in federal grants to invest towards that goal, is an abject failure of his administration to deliver on their own policy commitments.

The bottom line is:

This Plant Will Cause Needless Damage to Our Health & Climate While Gov. Murphy Violates His Own NJ Energy Policy We Need an Epiphany Now!

16. Who is responsible for the final decisions on this project?

While there are some local and federal permits needed, most fall under the DEP making Governor Murphy the person with the definitive power to stop this proposal. Because he oversees both NJ Transit and the NJ Department of Environmental Protection, he is responsible for the final decision on this project.

17. What can I do to impact the power system decision on this project?

You can let Governor Murphy know you oppose the NJ TRANSITGRID Power Plant:

- Sign our petition.
- Call Governor Murphy at 866-586-4069 and demand he halt the NJ Transit Fracked-Gas Power Plant, invest in a solar alternative, and declare an Emergency Moratorium on ALL FOSSIL FUEL PROJECTS IN NJ.
- Write letters to your town council letting them know you oppose the power plant.
- Bring your friends and neighbors to town council meetings to show their opposition to the power plant.
- Volunteer with the Don't Gas The Meadowlands Coalition.

Last edited 02/20/20