

A HEALTH IMPACT ASSESSMENT OF THE PROPOSED NATURAL GAS PLANT IN NEW ORLEANS EAST

PREPARED BY THE LOUISIANA PUBLIC HEALTH INSTITUTE (LPHI)
AND THE ALLIANCE FOR AFFORDABLE ENERGY (AAE)



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Michoud Power Plant
Photo credit: Claire Kim and Yoon Hong

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Credits and Acknowledgements

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Deep South Center for Environmental Justice

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Fauberg Homeowners Improvement Association

Village de L'Est Improvement Association

Villages of the East Coalition



Michoud Power Plant
Photo credit: Claire Kim and Yoon Hong

Executive Summary

Background

Entergy New Orleans (ENO) has proposed to build a new natural gas combustion turbine (CT) plant in New Orleans East. The proposed CT plant would be built at the same site as the Michoud Power Plant, which was decommissioned in June of 2016. According to ENO's proposal, the CT plant would fill a gap in energy services of New Orleans, principally during the hot summer months when energy demand is the highest. ENO, a vertically integrated investor-owned monopoly utility company, is regulated by the New Orleans City Council. As a regulated monopoly, in order to make large capital investments- like a new power plant or expensive infrastructure improvements- allowance for recovery of their investment through rates must be approved by the New Orleans City Council (the City Council).

The Louisiana Public Health Institute (LPHI) and the Alliance for Affordable Energy (AAE) conducted a health impact assessment (HIA) on the plan to build the proposed CT plant. An HIA is a "combination of procedures, methods,

and tools by which a policy, program, or project may be judged as to its potential effects on the health of a population and the distribution of effects within the population" (European Centre for Health Policy, 1999, p. 4). This project was supported by a grant from the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.¹ The purpose of this HIA was three-fold. First, the HIA sought to determine the potential health impacts of the proposed CT plant in order to help the City Council make a more informed decision on the proposed CT plant. Second, the HIA aimed to formulate recommendations on how to maximize benefits and minimize harms of the proposed CT plant. Third, the HIA intended to study and quantify health data and costs and create a model for how the City Council may capture health costs into the triennial resource planning process, called the Integrated Resource Plan, in order to properly account for ongoing externalized costs related to energy generation.

Context

New Orleans East faces a number of socioeconomic, physical, and mental health disparities, compared to New Orleans overall. New Orleans East was greatly impacted by Hurricane Katrina and was the last section of the city to regain basic utility services.

During community stakeholder meetings it became clear that New Orleans East residents were unaware that Michoud was located in their community, nor that another power plant decision was forthcoming. Constituents expressed confusion, anxiety, and anger over potential health effects of Michoud, and expressed interest in continued involvement in the HIA and decision-making

process. They were concerned that the proposed CT plant would be providing energy for all of New Orleans, but that the immediate impacts of operating the facility would be in New Orleans East. Residents noted that the disproportionate siting of industrial activities and their related environmental hazards have an inequitable impact on their community's health and well-being.

LPHI and AAE took the community's concerns into consideration in order to narrow down the HIA's focus to eight topics of concern: energy reliability, energy resilience, air quality, climate change, subsidence, noise, traffic, and household expenditures.

¹The views expressed in this HIA are those of the authors and do not necessarily reflect the views of the Health Impact Project, The Pew Charitable Trusts, or the Robert Wood Johnson Foundation.

Key Findings

Household Expenses ↑

The CT plant will raise energy rates and bills; higher electric bills limit available household income for food, medicine, and housing, leading to higher stress, emergency room visits, food insecurity, and loss of housing.

Energy Reliability ↑

Any local generation inside the transmission island, including the CT plant, will increase energy reliability when transmission lines go down for whatever reason. Higher reliability decreases blackout events and associated accidents, hospital admissions, and food - and water-borne illnesses.

Energy Resilience →

The CT plant will not increase energy resilience because the plant itself will be vulnerable to storms and flooding. In extreme weather events, blackout-related emergencies are equally likely with the plant as without it.

Air Quality ↓

The CT plant will emit toxic pollution to the air that would likely increase the risk of respiratory illness and asthma, cardiovascular disease, and cancer.

Climate Change Risk ↑

The CT plant will emit greenhouse gas emissions that contribute to climate change, which collectively is likely to increase exposure to extreme weather events, severe stress, widespread financial losses, and geographic displacement.

Sinking/Subsidence ↑

The CT plant will use groundwater and will likely continue to cause sinking in New Orleans East. Sinking increases risk to flooding, levee failure, mold-related respiratory illness, accidents, and geographic displacement.

Noise ↑

The CT plant is likely to add noise but only during the construction phase (12-18 months). The noise could increase annoyance/irritability, insomnia, and blood pressure.

Traffic ↑

The CT plant is likely to add traffic but only during the construction phase (12-18 months). Depending on construction traffic routes, increased traffic may increase air pollution, asthma and respiratory illness, and accidents.

Recommendations

The three central recommendations of this HIA are:

1. The City Council and ENO should ensure maximum transparency, offer outreach and education, and create more opportunities for New Orleans East community members to be included and engaged in decisions that will directly affect them.
2. The City Council should direct ENO to include externalized costs in the IRP process.
3. ENO must immediately cease groundwater withdrawals at Michoud and must use surface water for any future projects until the full scope of the impact on sinking is understood.