

## PROPOSED PROJECT SUMMARY

### CONSUMERS ENERGY COMPANY - ZEELAND GENERATING STATION – ZEELAND, OTTAWA COUNTY, MICHIGAN

The Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division (AQD), is asking for comments from the public on a proposed Permit to Install (PTI) for Consumers Energy Company - Zeeland Generating Station (CEC). The AQD will accept comments on the proposed PTI until the close of the comment period on December 16, 2024. We will review all comments before we make a final decision on the proposal.

#### WHAT DOES CEC CURRENTLY DO?

CEC operates an existing electric generating plant at 425 North Fairview Road in Zeeland, Michigan (Figure 1) under Renewable Operating Permit (ROP) No. [MI-ROP-N6521-2020a](#).

The facility consists of the following equipment:

- Two natural gas-fired simple cycle combustion turbines with dry low-NO<sub>x</sub> combustors
- Two natural gas-fired combined cycle combustion turbines with dry low-NO<sub>x</sub> combustors
- Two natural gas-fired duct burners
- A steam generator
- A natural gas-fired auxiliary boiler
- A cooling tower
- A diesel fire pump
- A cold cleaner

#### WHAT IS CEC PROPOSING TO DO?

CEC is proposing to install advanced gas path (AGP) and axial fuel staging (AFS) upgrades, which will increase the efficiency and electricity output of the two simple cycle combustion turbines. This is being done to meet anticipated electricity demand and to provide CEC greater operating flexibility.

The proposed changes will increase the maximum hourly input rate to the two simple cycle turbines increasing their electrical output capability. The



**Figure 1: Location of Consumer Energy Company – Zeeland Generating Station**

upgrades will increase the maximum allowed hourly emissions but not result in an increase to the existing allowed annual emission limits.

#### WHY IS CEC GOING OUT TO PUBLIC COMMENT?

The current CEC facility is an existing major source of air pollutants under both the State of Michigan and federal Prevention of Significant Deterioration rules and regulations. “Major source” is a classification given to a facility when the quantity of pollutants that are or may be released is over specific thresholds. Major sources are large emitters of air pollutants and require more oversight, testing,

recordkeeping, and reporting than sources that are not major.

Under the Michigan Air Pollution Control Rules, the AGP and AFS upgrades to the two existing turbines are considered a major modification at an existing major source because they have the potential to emit above certain levels for several air pollutants. Per Michigan's Air Pollution Control Rules, all major modifications are required to go out to public comment.

### WHAT IS THE CURRENT AIR QUALITY IN THE AREA?

The United States Environmental Protection Agency (USEPA) has developed health-protective standards for specific air pollutants. These standards are called the National Ambient Air Quality Standards (NAAQS).

There are NAAQS for [some pollutants](#), including sulfur dioxide, nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), particulate matter equal to or less than 10 microns in diameter (PM<sub>10</sub>), particulate matter equal to or less than 2.5 microns in diameter (PM<sub>2.5</sub>), ozone and lead.

Poor air quality from high levels of pollution can cause health problems. These standards are developed from research studies and set at levels to protect public health. This includes health protection for sensitive groups, like those with heart and lung problems.

The facility is located in Ottawa County, Michigan which is currently meeting all of the NAAQS. The AQD operates an [air monitoring station](#) in Ottawa County which measures PM<sub>10</sub>, PM<sub>2.5</sub>, and ozone. The purpose of the air monitoring stations is to assess the regional or area-wide air quality and is not used to determine if a specific source is in compliance with their air permit.

### WHAT DO I REALLY NEED TO KNOW ABOUT THE PROPOSED PERMIT?

The proposed permit has specific requirements CEC would have to follow if the permit is approved. Key

areas you may be interested in, or that you may want more details on, include:

- **Emission limits** – The amount of specific air pollutants allowed to be released.
- **Material limits** – The maximum amount of natural gas allowed to be burned in the turbines.
- **Process restrictions** – Must have and follow a malfunction abatement plan and a plan to minimize emissions during startup and shutdown of the units.
- **Operational restrictions** – Must operate emission control equipment properly.
- **Emission Testing** – Testing to show that emission limits are met.
- **Monitoring and Recordkeeping** – Must maintain appropriate records to show compliance with their permit.

### WILL AIR QUALITY STANDARDS BE MET?

A computer model was used to determine the expected impacts of the emissions from the proposed project on the air quality in the area surrounding CEC. This type of computer model is called an air dispersion model and considers many factors like the amount and type of emissions, wind directions, weather conditions, local geography, and other factors.

The model showed that the expected impacts from the project do not exceed the allowed NAAQS for NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

Michigan has developed health-based screening levels for additional pollutants referred to as [toxic air contaminants](#) (TAC) under its Air Toxics rules. The proposed TAC emissions from the project would comply with the AQD's health-based screening levels.

## WAS ENVIRONMENTAL JUSTICE CONSIDERED FOR THIS PROJECT?

Part of opening a proposed permit for public comment involves evaluating the community around the proposed project, including environmental justice, translation, and other community-specific concerns. Full details of how AQD considers this in permitting can be found in “[Including Environmental Justice: Air Permitting in Michigan](#)”.

The language evaluation looks at the number of people who speak English “less than very well” within a 1-mile radius of the proposed project’s location. This is required by EGLE’s [Limited English Proficiency Plan](#) using an environmental justice screening tool like USEPA’s [EJSCREEN](#). The evaluation found that translation into Spanish may be helpful.

## WHAT ABOUT NOISE, TRAFFIC, AND ZONING?

The AQD evaluates the potential air emissions from the proposed facility to determine if they comply with the air quality rules and regulations. The AQD does not have the authority to regulate noise or traffic outside the facility and does not have authority to evaluate compliance with local zoning requirements.

## WHERE CAN I FIND MORE INFORMATION?

Other information, like the [Technical Fact Sheet](#) and the [proposed permit conditions](#) can be found at [Michigan.gov/EGLEAirPublicNotice](#) under “Applications Open for Comment.”.

The Technical Fact Sheet has additional details about the project and how it will meet the rules and regulations, such as:

- A summary of the reviews completed by AQD staff.
- How the project will affect air quality and public health.
- A summary of what the proposed permit would require CEC to do.
- A summary of the allowed emissions included in the proposed permit.

- The rules and regulations that apply to the proposed project.
- Example emission calculations.

AQD staff can provide additional information upon request.

## SUMMARY:

The AQD has reviewed the PTI application submitted by CEC and prepared a proposed permit. If the proposed permit is approved, it will ensure the facility meets the applicable air quality requirements and protects public health. Therefore, we recommend approving the proposed permit.

However, before the AQD acts on the PTI application, we are requesting comments from the public. All comments received during the public comment period and virtual public hearing, if held, will be reviewed, then we will decide whether to approve, approve with modifications or deny the proposed PTI application. If approved, the AQD may decide to add or change permit conditions based on the comments received.

## WHO CAN I CONTACT?

For more information about the proposed permit, please contact Janelle Trowhill, AQD, at: [TrowhillJ1@Michigan.gov](mailto:TrowhillJ1@Michigan.gov) or 517-582-5312.

## WHAT PUBLIC COMMENTS CAN EGLE CONSIDER?

All comments from the public are important. But it is also important to know the law is clear about what we can and cannot consider when we make our decision. Some examples are:

What we can consider	What we can't consider
<ul style="list-style-type: none"> <li>✓ Technical mistakes in the review</li> <li>✓ Grammar and spelling mistakes</li> <li>✓ Other rules the action should consider and why</li> <li>✓ Why the action will not follow the rules</li> </ul>	<ul style="list-style-type: none"> <li>• Air, land, or water issues not part of the project</li> <li>• Indoor air pollution</li> <li>• Traffic</li> <li>• Noise and lights</li> <li>• Zoning issues</li> <li>• Anything unrelated to the project</li> </ul>

### HOW CAN I MAKE A COMMENT?

The AQD welcomes all comments from the public during the comment period. Before commenting, it is a good idea to “[View an Example](#)” of how to do it. You may also want to read the “[Public Hearings - What you should know](#)” card.

Documents pertaining to Consumers Energy Company - Zeeland Generating Station can be found at: [Michigan.gov/EGLEAirPublicNotice](https://Michigan.gov/EGLEAirPublicNotice)

Comments must be received by **December 16, 2024**.



#### Via email

[EGLE-AQD-PTIPublicComments@Michigan.gov](mailto:EGLE-AQD-PTIPublicComments@Michigan.gov)



#### Via US mail

Permit Section Manager, EGLE, AQD,  
P.O. Box 30260  
Lansing, MI 48909-7760



#### Via voicemail

by calling 517-284-0900



#### At the Virtual Public Hearing, if requested

in writing by December 4, 2024, to the address above, it will be held on **December 11, 2024**.

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