

What is the Michigan Public Service Commission?

The [MPSC](#) is a regulatory body that oversees public utilities in Michigan. It is comprised of 3 members appointed by the governor (no more than 2 from any one political party) each serving staggering 6 year terms. The MPSC's authority is determined through legislation and their mission is "to protect the public by ensuring safe, reliable, and accessible energy and telecommunications services are provided at reasonable rates for Michigan residents." The Commission oversees the following utilities in Michigan: natural gas, telephone and electricity. More on the MPSC and how this body regulates Michigan's public utility providers can be found in this [blog post](#) from the Natural Resources Defense Council.

What is an IRP?

An IRP is an acronym for Integrated Resource Plan. Very broadly speaking, an IRP is a utility's long term energy plan. By law, Michigan's public energy utilities (e.g., Consumers Energy and DTE) are required to submit their IRPs to the MPSC every 5 years for review and, ultimately, approval or rejection.

According to this [MPSC presentation](#), an IRP is defined as the following:

"An Integrated Resource Plan (IRP) is a comprehensive plan developed by an electric utility which outlines its future resource strategy – how the electric utility will provide reliable, cost effective electric service to its customers while addressing the risks and uncertainties inherent in the utility industry."

Furthermore, "The MPSC must determine whether an electric utility's IRP is the most reasonable and prudent means of meeting energy and capacity needs by considering whether the plan appropriately balances all of the following:

- Resource adequacy [wind, solar, oil, natural gas, coal, etc.]
- Compliance with applicable environmental regulations
- Competitive pricing
- Reliability
- Commodity price risks
- Diversity of generation supply
- Whether the proposed levels of peak load reduction and energy waste reduction are reasonable and cost effective"

Why are we concerned about DTE's IRP? (Talking points!)

Here is where the health voice comes into the conversation! While the MPSC is not required by *current* law to regulate over emissions, pollution or health impacts, the decisions made before this commission certainly have both environmental and public health ramifications. By law, the public is able to comment on a utility's IRP plan via mail, email or in person, such as the opportunity on June 20th.

We would like to highlight the following health concerns to the MPSC while they consider DTE's IRP:

Core Points:

- DTE's IRP demonstrates plans to retire a number of coal-fired power plants, which should be commended; however, coal continues to be a major source of energy production for decades to come.
- Coal-fired power plants emit toxic pollution into our air and water that contributes to climate change and negative human health and environmental impacts.
- Taking the cost of all of these externalities into consideration, we argue that DTE's IRP does not qualify as a "reasonable and prudent means of meeting energy and capacity needs."
- Clean and renewable energy sources and energy waste reduction resources are [cheaper than fossil fuels](#) like coal and gas and do not emit dangerous pollution or contribute to climate change.
- Michigan's most vulnerable residents need the MPSC to be a watchdog not only for their bill costs but also for their health and environment.
- We call on DTE to maximize their clean and renewable energy alternatives, fully and rapidly retire aged and costly coal-fired power plants, and stop relying on big, expensive natural gas plants as their primary means for transitioning away from coal.
- Shifting DTE's energy portfolio to more clean energy and energy efficiency will improve environmental and public health, and it will help to combat climate change.

Supporting Data and Sources:

- The combustion of fossil fuels (both coal and natural gas) are detrimental to human health through 2 mechanisms; First, they contribute to [climate change](#), which has a whole host of negative impacts on human health; And, secondly, through the direct inhalation of toxic [air pollution](#) emitted during their combustion.
- [Coal combustion](#) contributes to greenhouse gas (GHG) emissions that contribute to climate change, and climate change impacts public health negatively in the following [ways](#):
 - **Poorer air quality** is directly related to increased pollution, high heat days and increasing wildfires. Particulate matter, or soot, is a known [carcinogen](#) and some of it (PM_{2.5}) is small enough to penetrate deep into the lungs and bloodstream where research suggests it contributes to [premature deaths](#), [infertility](#), [various cancers](#), [neurological conditions and stroke](#), [cardiovascular disease](#), and various respiratory conditions, such as [asthma and chronic obstructive pulmonary disease \(COPD\)](#).
 - **Increased flooding** impacts water quality through contamination with waterborne pathogens and toxic chemicals, and moisture damages homes structurally and through contamination with [mold](#)- a known trigger for asthma and other respiratory conditions.
 - **Extreme heat** impacts human health in several ways: heat stroke/exhaustion/dehydration, triggers for exacerbation of chronic cardiovascular and respiratory conditions, and creation of ground-level ozone. In Michigan, it is estimated that we lose over [half a million "impacted days"](#) annually due to the health impacts of ozone pollution. "Impacted days" are those in which people miss school/work or are not able to carry about with their usual activities due to poor air quality (i.e., ozone levels exceeding recommended standards).
 - **Increased vector-borne illnesses**, such as [Lyme disease](#), which we are already seeing an influx of in Michigan.
- Coal combustion results in the following [toxic by-products](#) that directly impact human health negatively: [mercury](#), [arsenic](#), [cadmium](#), [lead](#), and other heavy metals. These toxic by-products are either ingested or inhaled.

- Coal combustion is a known contributor to the release of sulfur dioxide (SO₂), nitrogen oxide (NO_x), carbon monoxide (CO), and volatile organic compounds (VOCs) impacting air quality. Each of these has negative health impacts as well.
 - [Sulfur dioxide](#) is a respiratory irritant and exposure can contribute to the exacerbation of asthma, COPD, and/or heart disease.
 - [Nitrogen oxide](#) reacts with sunshine and VOCs to form smog or ground-level ozone. NO_x, alone, serves as a respiratory irritant and exposure is a concern for people with pre-existing respiratory conditions; however, its impact also needs to be considered as a key link in the formation of ground-level ozone.
 - [Ozone](#) is also a respiratory irritant that has been linked to premature death, inflammation of the airways and exacerbation of asthma, COPD, and congestive heart failure (CHF).
 - [Carbon monoxide](#) exposure can cause headaches, nausea, vomiting, dizziness, confusion and even unconsciousness.
 - [Volatile organic compounds](#) are a key contributor to ozone formation but, alone, also serve as respiratory irritants and are carcinogenic with long-term exposure.

- The negative health impacts of coal combustion are not distributed universally. We know that those [who live in close proximity](#) to a coal-fired power plants suffer higher rates of premature death, lung cancer, cardiovascular disease, diabetes, asthma, low birth weight, and infant mortality.

- All too often, the most vulnerable of our population suffer the greatest health burdens. Those with [pre-existing diseases](#), [children](#), [seniors](#), [people of color](#) and [lower income levels](#) are more impacted by the negative health impacts of air pollution.

- According to the American Lung Association, [State of the Air Report \(2019\)](#), [Michigan](#) (total population 7,474,222) has a significant amount of the population that is “at-risk” to the negative health impacts of air pollution due to their chronic conditions, such as people living with COPD (499,691), cardiovascular disease (595,065), diabetes (629,146), pediatric asthma (145,455), adult asthma (630,222), and those living in poverty (1,049,964).

- On “Air Action! Days”, [sensitive groups](#), like those mentioned above, are encouraged to limit their time outdoors to avoid the negative health impacts of poor air quality on that particular day. The air quality index is a measure of [5 major air pollutants](#): ground-level ozone, particulate matter, SO₂, CO, and NO_x.
- When temperatures rise and air quality worsens, it is recommended that sensitive populations avoid prolonged exposure to outdoor air. Essentially, you have to avoid going outside! This means that kids with asthma might need to stay inside on a summer day rather than get to play with their friends outside! It means that an individual with COPD or CHF may need to put off that trip to the grocery store or pharmacy. And it means that a parent may have to miss work because they need to attend to their child having an asthma attack.
- As a nurse, on high-heat days, we see people in the hospital with chronic heart/lung conditions and/or asthma because they are more likely to have an exacerbation of their chronic condition requiring medical attention. There is a known correlation between poorer air quality and [increased emergency department visits and hospitalizations](#).
- In [2018](#), Detroit experienced 9 of these “Air Action! Days”, Ann Arbor and Ludington both experienced 9 days as well; Benton Harbor had 10 days; Grand Rapids had 11 days; Traverse City had 2 and Kalamazoo had 1 day. These are the days, mostly concentrated in the summer, when children and adults with asthma, seniors, and people living with chronic conditions are discouraged from being outdoors. As you can see, some areas are worse than others for poor air quality.
- In Michigan, our asthma rate is [10% higher](#) than the national average; therefore, we have a higher at-risk population that needs our protection. However, there are certain geographic pockets throughout the state where rates are even higher than this.
- Current [asthma prevalence for adults \(>18\) in Detroit](#) is higher in comparison to the rest of the state: 15.5% versus 11%, respectively.
- The same is also true for [Detroit’s children \(<18\)](#): 11.3 % versus 9.7%.

- DTE plans to continue to operate coal-fired power plants either already in Detroit or within close proximity, which would impact an already overburdened population.
- According to a [study](#) by the American Thoracic Society (2016), ozone pollution (> 70 ppm) is associated with 275 excess deaths annually in Michigan, 640 serious illnesses, and over half a million “impacted days”- meaning days in which people miss work, school or their usual activities are interrupted due to the ramifications of poor air quality. Are the costs of these externalities being accounted while considering allowing DTE to continue to burn coal for another 5, 10 or 20 years?
- DTE’s IRP proposes to continue to burn coal at its Belle River and Monroe plants for yet another 10-20 years. In the face of a climate emergency, the public health implications already outlined, and the fact that these plants reside near already overburdened and vulnerable populations, how is this justified? We strongly encourage the MPSC to reject this proposal, push for DTE to expeditiously retire its remaining coal-fired power plants, expand renewables, maximize energy efficiency efforts and stop interfering with residential rooftop solar.