

February 16, 2021

Senator Dan Lauwers Chair, Energy and Technology Committee Michigan State Senate P.O. Box 30036 Lansing, MI 48909-7536 <u>SenDLauwers@senate.michigan.gov</u> Representative Joe Bellino Chair, Energy Committee Michigan House of Representatives P.O. Box 30014 Lansing, MI 48909-7514 JosephBellino@house.mi.gov

Dear Chairmen Lauwers and Bellino,

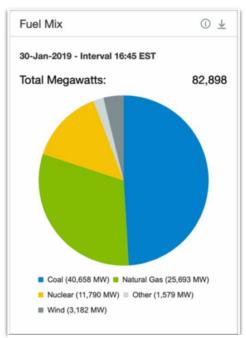
The news coming out of the state of Texas this week should remind every Michigan resident of our own recent experience with the failure of renewable energy to provide sufficient energy to meet the state's needs.

As you recall, the January 2019 "Polar Vortex" event led Gov. Whitmer and utilities across the state to ask Michigan residents to reduce their home thermostat levels to 65° or lower. They were told that the state's energy system would falter if they didn't cut their energy use.

During the 2019 Polar Vortex event, Michigan's energy systems were strained by rapidly increasing customer demand as a result of extreme cold. At the same time, a major source of our natural gas supplies failed spectacularly, while wind and solar supplied vanishingly small amounts to the grid.

The Midwest was fortunate, at that time, that we also had a substantial supply of nuclear and coal to supply essential energy for heating.

Unfortunately for its residents, Texas is much further along in its transition to an unreliable renewable energyfocused system that relies on just-in-time natural gas back up. In fact, wind sources overtook coal in Texas for the first time in 2020. In October, natural gas supplied Texans with 52% of their net electricity demand, wind 22%, coal 17%, and nuclear just over 8%.



MISO region Fuel Mix during the January 2019 Polar Vortex event

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Winter cold is shutting down over half of the wind generation capacity in Texas and literally freezing natural gas pipelines. The state's electricity regulator — ERCOT — has imposed "rolling" blackouts. Similar measures are being implemented by the Southwest Power Pool in Oklahoma, Missouri, and Kansas. Friends and acquaintances living in the state of Texas are reporting that temperatures in their homes have dropped below 50° and exposed pipes are freezing.

This is exactly the same sort of situation we experienced during the 2019 Polar Vortex. It is also the same sort of challenge we saw in California last summer, when higher temperatures and nearby wildfires caused increased demands on air conditioning. Solar generation failed and CAISO, the state's energy regulator, was forced to impose rolling blackouts as demand outstripped supplies when the sun began to set.

The stories coming out of Texas, Oklahoma, Missouri, Kansas, and California, as well as other areas that rely heavily on renewable energy, should cause every member of both the Senate and House energy committees to sit up and take notice.

Michigan's major utilities — Consumers Energy and DTE — have both committed to achieving net zero CO_2 emissions by 2040 and 2050 respectively. Both of these utilities' approved Integrated Resource Plans describe how they will close the state's reliable, affordable energy generation facilities — a mix of nuclear, natural gas, and coal — and attempt to replace them by trusting unreliable solar and wind, efficiency measures, and demand response (which effectively amounts to short-term rolling electricity outages).

We described the extreme costs of these plans in our <u>comments</u> to the MPSC hearing on the DTE IRP (MPSC docket U- 20471). But even more important is the fact that we are rapidly moving our electricity system toward the same heavy reliance on renewable energy sources, backed by natural gas, as both Texas and California.

Unfortunately, we are making these energy policy choices at the same time as we plan to impose massive new demands on our electricity system. We are pushing drivers to switch to electric vehicles and are attempting to close <u>reliable energy infrastructure</u> that daily provides more than 330,000 Michigan households with the propane they need to heat their homes and cook their food.

Homeowners will be forced to rely on electricity to heat their homes and automobile owners will need to plug in their cars if they intend to travel. But our 2019 Polar Vortex experience pairs with the experiences in California last summer and Texas and the lower Midwest today. Together, they demonstrate that renewable energy-focused grids are not up to the task when temperatures descend below, or rise above, a certain point. These policies will prove to be a recipe for disaster whenever we face weather difficulties.



As we noted in our recently published, "2021 Public Policy Recommendations" report,

Public Acts 295 of 2008 and 342 of 2016 mandate that a minimum of 15% of electricity produced by utilities must be sourced from renewable sources, such as wind and solar, by the year 2021. However, as the U.S. Department of Energy has noted, as solar penetration goes beyond 5% in an energy market, the likelihood that it will provide reliable power at peak demand drops off rapidly. Compounding this problem is the fact that solar energy, which is the primary source that both of the state's large public utilities plan to build for the foreseeable future, has a capacity factor as low as 8% during Michigan's cloudy and dark winter months.

All of Michigan's utilities have publicly committed to switching their generation fleets to rely on far more than the mandated 15% renewable requirements. Therefore, the state's legislators should feel comfortable rescinding the renewable energy standard. They can then adopt a <u>reliable energy standard</u> that requires any new electricity generation source be fully dispatchable. That is, ratepayers can rely on new electricity sources being constructed in the state to be available when they are needed, instead of only when the wind is blowing or the sun is shining.

To ensure Michigan residents do not suffer the same sort of power outages that Texans and Californians are enduring during extreme weather, we urge the Legislature to pass legislation that will require any new generation facilities that are approved for construction meet this basic dispatchability requirement.

Sincerely,

Jasón Hayes Director of Environmental Policy

Cc: Members, Senate Energy & Technology Committee Members, House Energy Committee