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3918 Paunack Ave, Madison, WI 53711
Date: 12/20/2024
9:45:00 AM

## Re: Whitewater Solar LLC, Docket: 9828-CE-100 Public Service Commission of Wisconsin

Dear Public Service Commission Staff,

Healthy Climate Wisconsin requests that PSC staff include the health benefits of investing in photovoltaics and transitioning away from fossil fuel dependency within our energy sector as part of the environmental assessment of the Whitewater Solar Project.

Healthy Climate Wisconsin represents over 900 health professionals and is working toward just, climate solutions for the future and health of our communities and environment, and expanding clean energy generation capacity is critical for our environment, health, and future.

Photovoltaic (PV) technologies and solar inverters are not known to pose any significant health dangers to local communities or their neighbors. The most important dangers posed are associated with the brief increase of construction-related traffic and dangers to trespassers if they come in contact with high-voltage equipment. This latter risk is mitigated by security measures and signage to deter trespassing. Due to the reduction in the pollution from fossil-fuel-fired turbines and electric generators, the overall impact of solar development on human health is overwhelmingly positive.1

According to the <u>US Energy Information Administration</u>, Wisconsin continues to rely on fossil fuels for 75% of its energy production. Whether it is coal or methane, combusting fossil fuels harms the health of our communities and the environment. This solar farm will help shift our state's energy portfolio toward clean energy production, reducing the disease burden children and adults in Wisconsin face due to burning fossil fuels.

Air pollution is a significant cause of cardiopulmonary disease, lung cancer, and death.2 Thousands of Americans die each year (estimates range from 7,500 to 52,000) from fine particulate matter emitted from power plants.3 Importantly, the burden of air pollution falls heavily on the most vulnerable populations, especially children. A 2018 report by the World Health Organization found that air pollution contributes to adverse birth outcomes, infant mortality, impaired neurodevelopment, childhood obesity, reduced lung function, higher rates of acute lower respiratory infections including pneumonia, asthma, childhood cancers, and adverse health outcomes in adulthood.<sup>4</sup>

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In addition to reducing particulate matter pollution, Whitewater Solar would reduce sulfur dioxide and nitrogen oxide pollution that is linked to asthma, cardiopulmonary disease, and premature mortality; and methane and carbon dioxide which are greenhouse gases that contribute to climate change. Avoiding these pollutants would contribute to improved health for Wisconsin residents by decreasing their exposure to disease-causing contaminants and climate health harms.5

A 2015 study in the Journal Nature Climate Change modeled the impact of replacing a coalfired power plant with wind, solar, and energy efficiency programs. The model examined the health and climate benefits of the various scenarios in the Lower Great Lakes and Mid-Atlantic regions. Annual savings ranged from \$5.7 to \$210 million depending on population, pollution burden, and other differentiating factors. 6 By approving this project and shifting to renewable energy we can improve health outcomes and reduce healthcare spending.<sup>7</sup>

Whitewater Solar, LLC, adds 180 megawatts of solar generation capacity and is an essential step forward as we shift away from burning fossil fuels that threaten the health of Wisconsin residents and toward clean, safer, renewable energy. Again, Healthy Climate Wisconsin asks that PSC staff include the social and health benefits of transitioning away from fossil fuel dependency within Wisconsin's energy sector as part of the environmental assessment. Thank you for your time and consideration.

In service and health,

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Healthy Climate Wisconsin Board Chair Joel Charles, MD, MPH

Abby Novinska- Jois

Healthy Climate Wisconsin Executive Director Abby Novinska-Lois, MPH

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References:

- 1.Wiser R, Trieu M, Millstein D, Macknick J, Carpenter A, et al. On the Path to SunShot: The Environmental and Public Health Benefits of Achieving High Penetrations of Solar Energy in the United States. Golden, CO: National Renewable Energy Laboratory. Accessed March 2017, www.nrel.gov/docs/fy16osti/65628.pdf
- 2. Dockery D, Pope C, Xu X, Spengler J, Ware J, Fay M, et al. An association between air pollution and mortality in six U.S. cities. N Engl J Med. 1993; 329: 1753-9.
- 3. Caiazzo F, Ashok A, Waitz I, Yim S, Barrett S. Air pollution and early deaths in the United States. Part I: Quantifying the impact of major sectors in 2005. Atmospheric Environment. 2013; 79:198-208.
- 4. Air pollution and child health: prescribing clean air. Summary. Geneva: World Health Organization; 2018 (WHO/CED/PHE/18.01). License: CC BY-NC-SA 3.0 IGO.
- 5. Wisconsin State Energy Profile. U.S. Energy Information Administration. <u>https://www.eia.gov/state/print.php?sid=WI</u>. Accessed December 17, 2024.
- Buonocore, Jonathan & Luckow, Patrick & Norris, Gregory & D. Spengler, John & Biewald, Bruce & Fisher, Jeremy & Levy, Jonathan. (2015). Health and climate benefits of different energy-efficiency and renewable energy choices. Nature Climate Change. 6. 10.1038/nclimate2771.
- 7. Dimanchev EG, Paltsev S, Yuan M, et al. Health co-benefits of sub-national renewable energy policy in the US. Environ Res Lett. 2019;14(8):085012. doi:10.1088/1748-9326/ab31d9.