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A Larger Story of the High Voltage Transmission Lines

I attended the Otter Tail Power Company and Missouri River Energy Services (BSSA) meeting at Sioux Historic on June 27. This was a very well attended event.

I remain worried, not only about the visual impact of the monopoles (the 90-150 ft x 38 ft structures), but the potential health implications from them. I expressed health concerns at the June 13 meeting (at the Ally Cat), in a subsequent phone call with a representative from Otter Tail Power, and at the June 27 meeting. Part of my concern is that our ability to create technology is moving at a faster pace than our ability to understand its impact on our health and well-being.

Regarding safety issues, a handout from the June 27th meeting, by North Grid Partners states: "This issue has been studied for more than 40 years by government and scientific institutions all over the world. The balance of scientific evidence indicates that the exposure to electric and magnetic fields does not cause disease."

The key word here is *balance.*

Otter Tail Power and Missouri River Energy have provided us with research and information regarding the safety of the monopoles. While this is convenient, it puts us in a position of being reliant on them to share findings. In reading their materials, if I hadn't explored a broader scope of information, I would assume that there are no safety risks regarding the monopoles.

From four different countries, including the US, I found research showing negative health impacts of high voltage electrical lines. There is research that is inconclusive, and research showing no negative health outcomes.

I am not a physicist or a medical researcher. This is highbrow science. I could imagine a scientist paid by Otter Tail Power and/or Missouri River Energy could contradict my concerns. That said, I would be curious about what a physicist would say, who is not associated with the power company, and who is not on their payroll.

This is a difficult topic to research, due to the many variables. Every country is different, voltage strength, spacing of the conductors, the environment in which the lines exist, and how far away people live from the lines. Even in the US, states vary in terms of "right-of-way" standards. Additional electric and magnetic fields, from other sources, must be taken into consideration. As in most medically related issues, genetics, pre-existing health conditions, and a vulnerability in age, in both younger and older people influence health outcomes (Sher). Some people are more sensitive and experience negative impacts from high voltage transmission lines, while others don't notice them.

Some scientifically reported health issues are that electric magnetic radiation breaks down DNA strands which affect cell function and weakens the immune system (Balaji). "There is substantial and robust evidence that establishes a causal relationship between electromagnetic fields and radiation reduced melatonin" (Cherry). A reduction in melatonin not only adversely affects sleep but can be a precursor to numerous health issues (Kulkarni). Concerns of sleep issues and mental health issues were present in most of these articles.

During the June 27 meeting, I asked what the budget was for this project. I was told it is a $400 million to $600 million. In my mind, this establishes them as *big power*.

There is a precedent of corporations, when *big* money is involved, to position themselves in research and information that serves their goals. Examples include the tobacco, pharmaceutical, and food industries. In all these cases, a significant health price has been paid by the American people.

I agree with BSSA, on *balance* there is more research that concludes that there is no correlation between the high-voltage transmission lines and adverse health outcomes. But other perspectives and research does exist. People's lives, and health, have been negatively impacted by electric and magnetic fields emitted by transmission lines.

BSSA would have us believe there are no potential health risks in these lines coming through our community and region. Maybe. Maybe not. But the more informed we are, the less vulnerable we are. We are empowered to ask better questions, which

helps us to make better decisions on a personal level, on a family level, and on a community level. Because ultimately, information is also *big power*.

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