Chairman Porter & Members of the House Energy & Natural Resources Committee

Thank you for your time and consideration of my testimony. My name is Jared Hendrix, of Minot. I write in support of HB 1353 – one of the more important pieces of legislation during this session. I grew up in Virginia, around one of the most active military populations in the United States – including major installations of every single branch, not to mention the production of most of our nuclear carrier and submarine fleets. It has always occurred to me what the dangers of a concentrated attack could be around such critical infrastructure.

Simply put, all of modern society relies on our power grid. Water, food, waste treatment, fuel production & distribution, transportation, financial, radio, communications and hospitals – all depend on "the grid". Considerable research and discussion on the threats of an EMP attack or natural phenomena has occurred for many decades – but little action at both the state and federal level. This represents an existential threat to our nation, and indeed humanity, for which we are wholly unprepared. The most likely sources of an attack are the detonation of a nuclear weapon, a powerful solar flare, or potentially some type of sabotage.

We are entering what is called a solar maximum period which will occur between 2023 and 2026, during which the Sun's magnetic polarity flips. This will increase sunspots and coronal mass ejections. It is understood that this tends to occur on 150-200 year cycles. Infamously, the Carrington Effect took place in 1859, sparking random fires in telegraph stations globally. With today's technology, there is no doubt such an event would be devastating. Indeed, a congressional study from 2004 projected a 90% fatality rate. Even if exaggerated, it is not difficult to imagine that an almost immediate loss of mass food production & distribution, potable water, needed medical supplies, and the panic caused by a loss of modern communications could have apocalyptic repercussions.

More recently China, with one of the most active ballistic weapons developments in the world, has created a threatening arsenal. Their increased development of advanced satellites and EMP weapons is concerning. Much like the threat of nuclear war, this threat is somewhat reciprocal, which can keep both sides in check. Yet, the danger remains very real. Either China or North Korea, for instance, could easily destroy major components of the U.S. power grid with a calibrated weapon. It is also worth noting, much like how policymakers have sat back and allowed Chinese interests to purchase major tracks of agriculture in the U.S. (think Fufeng in Grand Forks), or monopolies on essential medical supplies (think antibiotics), in the last 10 years, we have imported over 200 large power transformers from China. Investigations have shown some of these transformers have hardware backdoors, increasing the risk of adversarial foreign hacking.

Why has there been such little action on this issue? The reason is threefold. One – a lack of transparency, accountability, and whistleblower protections from within the electrical industry, as it relates to vulnerabilities and protections against known hazards. Two – a lack of courage from our representation to take the lead against this powerful lobby, which has millions to bear. Three – a wide array of misconceptions from, unfortunately, widely cited scientific publications and authorities that have falsely downplayed the real risks of an EMP attack.

Rep. Satrom has been very forward-thinking in introducing this important bill. For in depth expertise on this issue, I highly encourage you to visit <u>securethegrid.com</u>. Please give HB 1353 a Do Pass out of committee. If the federal government is slow to act, then we have an obligation to take steps at the state level.

Respectfully, Jared Hendrix