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Grassroots Technological Resistance: The People's Power Project and the Impossible Dream of Wireless Transmission of Energy

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Abstract

In 1972, the Minnesota United Power Association (UPA) teamed up with the Minnesota Cooperative Power Association (CPA) to initiate an electrification project designed to bring power from North Dakota to the Twin Cities area. A significant backlash and protest began once farmers across the state became aware of the plan and the potential impending land seizure. In the midst of these actions, one group sought to create an alternative to the power line transmission system by designing a system of wireless energy transmission based on the plans of Nikola Tesla. This self-funded conglomeration of farmers and amateur researchers formed the People's Power Project (PPP) and set about building Tesla's system for the wireless transmission of energy. Using archival documents, this paper recounts this episode and argues that, in this case, the potential for successful grassroots action was derailed by the influence of long-standing myths about Tesla and his devices.

Cervantes' classic novel *Don Quixote* presents a rich depiction of a man who confuses myth with reality.[1] Enamoured with stories of chivalry, Don Quixote becomes convinced that he is a knight errant. In mapping his fantasy onto the world's reality, he wreaks chaos and comedy in equal measures. In so doing, Cervantes encourages readers to evaluate how fiction and myth relate to our understanding of history and impact upon our daily actions and goals.

While working on a research grant at the Bakken Museum in Minneapolis, I came across a small archive that included clippings from local Minnesota papers alongside other loose documents. Reading through them, I felt much like the narrator of Cervantes' tale who stumbles upon the stories of the venerable Knight of Lamancha. What the archive and subsequent research revealed is a modern occurrence of myth blurring into reality, and the impacts that distortion had when citizens in Minnesota sought to confront powerful bureaucratic and technological systems through the myths concerning Nikola Tesla and his system for the wireless transmission of energy.

Here is that quixotic tale:

In 1972 two power companies—the Cooperative Power Association (CPA) of Edina, Minnesota and the United Power Association (UPA) of Elk River, North Dakota, developed plans to build a large electricity-generating plant on the site of a coalmine near Bismark, North Dakota. The project was known as 'U Project' and designed to transport electricity 430 miles to the outskirts of Minneapolis-St. Paul via an 800,000 volt direct current (DC) power line strung up along high-tension towers. While power companies insisted the line was needed to meet imminent power shortages in the Twin Cities, it also provided CPA & UPA greater control of the electricity market in the rural Midwest and stood to increase their overall profits. The power companies were able to take advantage of low interest loans from the Rural Electrification Association (REA) to fund the project. Despite being one of highest powered DC lines in America at the time, one of the most expensive projects in REA's history (costing roughly $1.2 billion), and the proposed route for the line requiring the seizure of large sections of private property, the plans were kept a secret from the public for two years.[2] By October 1974 the project was fully funded and ready for implementation. Across Minnesota, power company officials began approaching town councils, county boards, and other local bureaucracies about the next steps. At these venues, the power line was presented as a necessary and even inevitable step to meet the future demands of the Twin Cities area. Here too, landowners got their first glimpse of the plan and many were surprised to find the path of the line crossing their property.[3]

Shortly thereafter, Minnesota citizens began a grassroots information campaign to spread word of the CU project, entailing articles in local newspapers, community meetings, and chains of phone calls. At subsequent information meetings, CU representatives found themselves increasingly confronted by an aggressive, sceptical public. Citizens also initiated legal action, halting development of the line for two years. However, the power companies, marshalling significant legal teams and political influence, subsequently satisfied all legal and bureaucratic obstacles. In spring 1976, workers began to survey for route, which crossed some 470 farms.[4] On June 8, 1976 St. Cloud farmer, Virgil Fuchs, initiated a new phase of confrontation between the power companies and the public

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[1] Miguel Cervantes, *Don Quixote*, trans Edith Grossman (New York: Harper Collins, 2003).

[2] Paul Wellstone and Barry M. Casper, *Powerline; The First Battle of America's Energy War*, (Minneapolis: University of Minnesota Press, 2003), 3–14.

[3] *Powerline,* 25–27.

[4] *Powerline,* 29–127.

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by using his tractor to run over surveyor's equipment and smash a power company truck. He was arrested and the publicity from the event provided a call to action to other farmers. Subsequently, large groups of farmers (sometimes in their hundreds) came out to farms; blocking surveyors with their bodies, farm equipment, and vehicles. Protests continued in this fashion leading to further legal review as tensions escalated. This halted progress on the project until the end of 1976. Much of 1977 was spent trying to resolve the confrontation at a legislative level.[5]

In February of that year, Will Mische, an employment counsellor for the State of Minnesota, read a seemingly fantastic newspaper article about Russia experimenting with Nikola Tesla's system for the wireless transmission of energy. Seeing this miraculous experiment as a potential solution to the power line standoff. Beginning in late February 1977 Mische helped organize a group ultimately called the 'People's Power Project' (PPP) dedicated to researching and developing Tesla's wireless transmission of electricity. The group initially consisted of a handful of life-long farmers of various educational backgrounds. Their endeavour drew media attention and subsequently the group grew to include members of local churches, state employees, college students, professional and amateur scientists from Utah, New York, Canada, and Seattle and fanatics of Tesla's work from as far as Yugoslavia, Arabia, and Australia.[6] Awaiting trial for his attempts on the surveyors, Virgil Fuchs supplied land and much of the materials for ensuing PPP efforts, including a small portable home set up at the site to accommodate numerous visitors and volunteers.

This eclectic group also sought out Tesla researchers for help with their project. One instrumental individual was Andrew Michrowski, who held the position of a futurist for Canada's office of the Secretary of State in addition to acting head of a private research organization called The Planetary Association for Clean Energy (PACE). Michrowski agreed to collaborate with the PPP. Based on what the members learned from Tesla researchers and Tesla's own plans and patents, PACE would build the transmitter of the wireless system in Timmins, Ontario. They would then attempt to transmit electricity 700 miles to Virgil Fuchs farm in Belgrade, Minesota, where the PPP would build a wireless receiver.[7]

Newspaper articles covering the efforts also regularly quoted another important member of the PPP named Sheldan Nidle. In his appearances in the print media he often spoke to technical aspects of project and was consistently described in articles as a 'New York scientist' or 'the scientist working on the project.'[8] Outside of these labels, he was given no credentials and the records are unclear as to his background or exact involvement with the PPP. More recent sources, however, are more revealing. For instance, *Wikipedia* explains that Nidle is 'known for his prediction that the world would end on December 17, 1996. . . with the arrival of 16 million spaceships and a host of angels from the 'photon belt." Nidle's personal website indicates he holds a number of advanced degrees including masters degrees in political science, governance, and international administration, but no degree in any scientific discipline.[9] However, before he became a UFO prophet, he was 'the scientist' in St. Cloud, and he was there to help the PPP try to change the world.

The PPP's actions first drew media attention on March 26th, 1977 in both *Minneapolis Star* and *St. Cloud Daily Times*. These articles explain how the PPP called upon the Minnesota Governor to form a task force to study the group's attempts to transmit electricity wirelessly as a means of providing electricity to the Twin Cities. Though the governor was receptive to the idea, he remained uncommitted. These articles initiated a series of reports in the *St. Cloud Times* over the next five months tracking the PPP's progress in building the wireless system. These articles reveal that disorganization plagued the PPP from the beginning. This is especially clear in instances where members tried to explain the project to the press. Accounts of what was being built and what it was supposed to do varied drastically from article to article. For example, in one early article, a PPP member vaguely explained: 'Tesla's discovery gets this static charge in the atmosphere moving up and down at a slow frequency and gets a pumping action in the earth. . . Once you get [the system] oscillating, you get more power [out] than you put in.'[10] In a later piece, readers were told an amazing 100 million volts pumped into ground at Timmins will miraculously 'go to the opposite end of the world and bounce back, setting off waves of electrical energy [that will] spread out throughout the world similar to waves spreading out from a rock thrown into a pool.'[11] Subsequently readers were told the PPP would 'pump' a fantastic *billion volts* of electricity into the ground. Such inconsistencies certainly left many readers, and perhaps the PPP themselves, perplexed about exactly what was being done on the Fuchs' farm.

Oral histories of the events reflect similar confusion. While members offer explanations that often illustrate their technological literacy and competence, they were often unclear or rambling in explaining how the device was supposed to work. The purpose of the project also seemed uncertain. While some saw it as the solution to the power line problem, others simply saw it as an interesting experiment, while others envisioned loftier goals. An

[5] *Powerline*, 136–148.

[6] Presence of participants from Utah, New York, Canada, and Seattle all established in Dave Peters, 'Grassroots Effort Brings Electricity Test to Area,' *St. Cloud Daily Times*, March 29, 1977. Presence of participants from Yugoslovia, Arabia, and Australia established in interview with Math and Gloria Woida for the Minnesota Powerline Construction Oral History Project, which has been digitized and can be found at http://collections.mnhs.org/voicesofmn/index.php/10002532. The Woida's actual interview is located at http://collections.mnhs.org/cms/display.php?irn=10448606 (Accessed: 11-8-2016).

[7] 'Area Site for 'Electricity Without Wires' Test,' *St. Cloud Daily Times*, March 26, 1977, 9. Mark Pearson, 'Electricity Theory Forum Planned,' *St. Cloud Daily Times*, April 25, 1977, 27.

[8] For instance: Mark Pearson, 'Powerline Transmission Backers Face Off at SCSU,' *St. Cloud Daily Times*, May 4, 1977, 25.

[9] See: https://en.wikipedia.org/wiki/Sheldan Nidle (Accessed: Oct 19, 2016) and 'Who is Sheldan Nidle?' http://www.paoweb.com/bio.htm (Accessed: Oct 19, 2016).

[10] Dave Peters, 'Grassroots Effort Brings Electricity Test to Area,' *St. Cloud Daily Times*, March 29, 1977.

[11] Mark Pearson, 'Inventor as Fantastic as His Wireless Theory,' *St. Cloud Daily Times*, May 14, 1977, 9.