The New "AOL": Activism On-Line and the role of the Internet in community organizing

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Abstract

This paper examines the use of the Internet as a tool for rural social activism and as a social space for the public to be represented in important state and federal policy decisions. Computer-mediated communications have increasingly been used by activists, company representatives, and the state in the fight over the 190-mile, 400,000 volt HVDC powerline proposal introduced in March 2006 by a private, for-profit company New York Regional Interconnect (NYRI). Survey data from key players in the dispute and content analysis data outline the different technologies of the internet (email and the WWW, primarily) which have been employed to disseminate information. In this case, the internet has created a new space for the public dispute of the knowledge and science behind the NYRI powerline proposal. Particularly relevant in this case are the factors of citizen passion, community organizing, and acquisition of competitive resources (Clark and Rempel 1997) that were garnered to oppose the two billion dollar investment put into the proposal by NYRI, as well as the byzantine government permitting process that must be engaged in such battles.

Introduction

"No machine is an abstract force moving through history. Rather, every new technology is a social construction and the terms of its adoption are culturally determined." – David E. Nye, *Electrifying America*

This is the story of a group of people I became affiliated with as the result of a proposal to build a new powerline through central New York State made in March 2006. This group immediately opposed the powerline and became extraordinarily active in doing what they could to stop the building of a powerline through their communities. Their story – and that of the significant others they came into contact with as a result of their opposition – is the one told here. Although this story begins in 2006, some background information regarding the social conditions which brought it about will be a useful way to situate the knowledge gained from its telling. So, I will start nearly 175 years ago to explicate the relevant history.

On October 17, 1831, Michael Faraday demonstrated the principle of electromagnetic induction, demonstrating the idea that mechanical energy could be transformed into electrical energy and back again. In 1888, Nikola Tesla introduced the first practical induction motor operating on alternating current. "During the remarkable decade of the 1880s, Edison, Parsons, Stanley, Tesla, Westinghouse, and their collaborators put in place the foundations of a new industry. The subsequent expansion of this industry became one of the critical defining forces of the twentieth century" (Smils, 1994). This defining moment began a comprehensive transition in the "prime mover" of societies world-wide to electrical energy (see Figure 1).

This transition to electrification was tied to an unprecedented exponential shift in the production and consumption of energy worldwide (Smils, 1994). Today, many take for granted the availability of cheap electricity in industrialized nations, while rural regions of developing countries are the last to see electricity infrastructure. Yet, it can hardly be doubted that the electrification of the world is a goal of modern civilization. "The electricity supply [worldwide] was going up by 10.5

percent per year between 1900 and 1935 and by over 9 percent per year until 1970...Since 1970, the growth of global electricity generation has been roughly halved. This decline reflects lower growth in demand throughout the rich world. The tenfold gain of total fuel use in less than 150 years stands in great contrast to the previous experience" (Smils, 1994: 187) (see Figure 2). This exponential growth is not coincidentally linked to similar J-curves in population growth, environmental pollution, and internet networking.

Since the dawn of the electrification of the world less than 200 years ago, transmission of electricity has been a problem not easily solved mutually and typically installed by fiat. The history of electrical transmission in the 1930s, particularly the rural electrification of Roosevelt's New Deal in the United States and the industrialization of Stalinist Russia, invoke projects more government mandated than market inspired (Weil 2006, Schewe 2007).

Activism against electrical transmission infrastructure has accompanied the fast rate of growth particularly since the 1970s. The growth in size of transmission towers also spurred greater activism after the 1970s (see Figure 3). And, in the United States, social conditions of the countercultural revolution of the late 1960s grew environmental and anti-bureaucratic concerns over government planned transmission infrastructure.

Accompanying these activist concerns of the late 1960s and 1970s was the development of a new means of social networking: computers and the Internet. The new media that the development of the early Internet created have now become central to contemporary political and social activism (DiMaggio et al 2001, Putnam 2000, McCaughey 2003, Kahn and Kellner 2004, Garrett 2006). The Internet is a tool that has crystallized citizen activism in a way unprecedented since perhaps union organizing transformed class politics in the early twentieth century.

It is interesting and ironic to note that the origin and exponential expansion of the Internet (see Figure 4), a tool used by activists to an ever greater degree in order to fight new electrical

transmission lines, is tied to the widespread availability of communications and energy utilities, particularly electricity. Without phone and cable lines, and perhaps more significantly without power lines, computers and the Internet would be moot. But this is not to emphasize a deterministic relationship between the two; rather, it is simply to state the cultural coincidence regarding two competing uses of the electron (for mechanical power and for information).

The use of new media, such as the Internet and texting (which, today are intersecting), to prompt social activism has become well-recognized. Castells (1997) has outlined the Zapatistas use of the Internet in the Chiapas case. "Smart mobs" (Rheingold 2002) have used cell-phone and laptop technology to engage in the first "netwars", such as the "Battle of Seattle" (Kahn and Kellner 2004) and, more recently, opposition to elections in Iran. In a general survey of the social implications of the Internet on social activism, DiMaggio et al (2001) created general five categories of Internet activism: inequality (digital divide), political, economic, and social capital, and issues of cultural participation and diversity. Putnam (2001) has discussed the importance of the Internet to a reestablishment of the flow of social capital in the U.S., and the latest focus on virtual worlds by Malaby (2009) shows how social and cultural capital are central to the construction of horizontally-structured virtual spaces within which we organize online.

This discussion will center on a case study of resistance against a particular project involving the proposed development of power lines in central New York State. The power line proposal, established by a company named New York Regional Interconnect, Inc., in March 2006, was withdrawn from the state permitting authority on April 3, 2009, after an intense campaign of citizen challenges as well as political and regulatory pressures.

In order to best comprehend the nature of the controversy over the NYRI proposal, it is best to briefly review the history of the electrical transmission industry and other political-economic or techno-scientific controversies that have existed in the past.

Political-economic controversies regarding electric transmission

Communism is Soviet power plus the electrification of the whole country. – Vladmir Lenin, slogan emblazoned on the wall of every power station (Schewe 2007: 90)

The electrical industry has a history of controversy, largely because of the networked nature of the electrical grid and the territorial nature of transmission lines. Typically, huge tracts of land must be crossed in order to link supply (remote generators) with demand (urban populations) and that means that rights of way must be developed, often at the expense of private landowners. This tension between public and private aspects of electricity provision is central to the controversies which have emerged.

Gordon Weil (2006), a licensed power broker and energy consultant, writes extensively about the tug-of –war that goes on between the public and private sectors of industry with regard to ownership and regulation of the electricity business. Complex rules have emerged from the time that Thomas Edison and Sam Insull began their ventures into the "natural monopoly" of the electric industry (an idea reiterated in legislative terms through 1978). This was partly as a result of the nature of the commodity: electricity cannot be effectively stored for later consumption. It is an "ondemand" product and electricity generated, if not used, will be lost (Freeman, in WGBH Education Foundation 2001). Another reason for the public control and regulation the of electricity markets was due to the political nature of the development of infrastructure. For instance, in creating central power stations, Insull "recognized that he needed political support for his plans and so he devoted much of his efforts to cultivating politicians. Often he succeeded, but when he failed, he reacted intemperately. His occasional fury with some politicians, never forgotten by those he opposed, would prove to have a significant effect on the development of the electric industry" (Weil 2006: 11). One such development was the creation of the Federal Power Commission (FPC) in 1920, bringing the control of dams that supply electricity into the power of the federal government.

At the end of the 1920s, Roosevelt had the perfect opportunity to introduce a stronger government hand in regulating an emerging large, monopolistic electric industry when the Great Depression brought the economy to a standstill. One of the most memorable projects of the New Deal was the establishment in 1935 of the Rural Electrification Administration (REA), principal sponsor of which was George Norris (architect of the Tennessee Valley Authority (TVA) two years earlier). The Federal Power Act (FPA) of 1935, giving true regulatory authority over investorowned utilities. Accused of shady dealings (not unlike those of Enron seventy years later), Insull fell into disgrace in the public eye and he died shortly after the establishment of the FPA. The first wave of government control of electricity provision in the United States had begun (Weil 2006; Schewe 2007). This control was to remain relatively stable until the 1980s, a period of deregulation in business across the board, and the electricity industry was no exception.

Compared to the earlier days of the Roosevelt era, changes in the economic and legislative realities of the Reagan era were profound. Deregulation became the key objective of every Republican administration from Reagan through George W. Bush, a period which demonstrated a diametrically opposed attitude toward the regular provision of electricity to the public.

Regulatory change actually began in the Carter era with a motive other than that of privatization, when in 1978 the Public Utility Regulatory Policies Act (PURPA) was passed. This act "was driven by the simple notion that government had to give incentives to the electric industry to get it to rely on domestic, renewable, or efficient resources and substantially reduce its reliance on expensive and vulnerable imports" (Weil 2006: 40). This created a fissure in the industry between power generators and power transmitters: "PURPA represented the beginning of the end of the vertically integrated or bundled utility, which had owned the generator, the meter on the customer's house, and everything in between" (see Figure 6). The practical result of this split was

that the stage had been set for the development of a competitive electricity market, with different owners managing different aspects of the grid.

The coincidence of the effect of PURPA on the development of an unregulated, if small, market and the political climate of the 1980s Reagan-Bush era led to the Energy Policy Act (EPAct) of 1992, an act that was as transformative of the electric industry as the laws created by Roosevelt's New Deal. "EPAct," says Weil, "is an insider's law, a product of the utilities and independent generators. They gained political support for EPAct among those who were convinced that it would guarantee lower prices for consumers. Without any careful analysis of where the new law might lead, President G.H.W. Bush and Congress seemed to think it could do no harm..." (2006: 53). These changes were inspired in part by recent changes in the natural gas and telecommunications industries. These industries showed some benefits to consumers through increased competition when they were deregulated in the 1980s. However, electricity is not a commodity like gas or information, which can be stored to influence supply (and thus price) in the future, as previously mentioned. The analogy is weak. "Important, of course, is the lack of any telephonic equivalent of the costly generator. The telephone industry could be restructured simply by changing rights with respect to the use of existing lines and switches. While FERC [the Federal Electric Regulatory Commission could do the same for power lines, there also have to be enough generators available to serve customers at the ends of those lines. From the start of the electric industry restructuring, the hopes of those looking for a major change for residential customers, as had happened for the telephone service, were doomed to be disappointed" (Weil 2006: 54-55). Deregulation was different for the electrical markets, particularly because of the need to separate generation from transmission.

After a decade of deregulation, several facts became apparent. First, this was not complete deregulation, not a Darwinistic free-for-all for provision of electricity. Such raw competition would

interrupt services and was unviable. There was still a need for some regulation. The new rules basically involved merely settings rates and putting up "firewalls" between generators and transmission utilities so that they could not take advantage of the previous existing monopoly.

In 1996 FERC codified these rules into Order 888 (after the new address of FERC at 888 First Street, Washington), an edict which was oft challenged by states and utilities as to the sweeping powers invoked by the rules. Because of the unfamiliarity of the agency with market regulation, these rules were continually rewritten over the following five years, leading to thousands of pages of regulation that were labyrinthine and mysterious. Small players were disenfranchised from the new system, being left behind by those larger companies already part of the system. So, there was not significant change in many regions of the country.

In those regions where markets did develop, "the major beneficiaries were the large industrial customers...The regulators came to believe that competition was an end in itself, completely losing sight of the need to produce better prices" (Weil 2006: 79). As a result, consumer prices were thirty-percent higher in those sixteen states where electricity deregulation was active, compared to other states that relied more heavily upon traditional regulation to control prices (see Figure 7).

To add insult to injury, some companies decided to take market deregulation to mean "anything goes." Enron is certainly the most famous of these cases. Weil (2006) devotes an entire chapter to the Enron debacle. Enron was primarily a private energy market company capitalizing on deregulation in California and elsewhere. They would buy and trade electricity in the daily wholesale market on very small margins but at great volumes. One strategy used by Enron for bilking Californian energy consumers was called the "Death Star" strategy, or the practice of shuffling energy around the California power grid to receive payments from the state for "relieving congestion." According to the company's own memo they would be paid "for moving energy to

relieve congestion, without actually moving any energy or relieving any congestion" (Wall Street Journal, 2006).

For example, if the California power grid was congested with energy flowing south, Enron would schedule energy to be transmitted north to Oregon . They would receive a payment from California for apparently relieving congestion on the grid. Then Enron would schedule the energy to be moved back to its point of origin, but not through California . Ultimately the energy would end up right back where it started and Enron would be paid by California without actually putting any electricity on their grid. Other fraudulent Enron strategies included the "Fat Boy" and "Ricochet" schemes designed to overschedule power transmission and "launder" megawatts (like money laundering, only using energy instead), respectively (Wall Street Journal, 2006).

Weil notes that "the Enron traders knew what they were doing was illegal, but they believed that Ken Lay's close friendship with President Bush and Vice President Cheney would assure that they would be immune from any sanction. Their arrogance was manifested by their willingness to have their conversations" (2006: 100). But there were others besides Enron who saw this as a market opening rather than chicanery, including Duke Energy, Portland General Electric (owned by Enron), and Mirant Corporation, a Southern Company subsidiary.

All of this talk of market manipulation and deceit would be esoteric and likely purely academic if it did not have an impact on electricity pricing and reliability. But it did. In summer 2000, consumer prices for electricity climbed an astounding \$1 billion more in June and July than during the same period the previous year. "Enron exploited this situation," says Weil, "beyond any limits ever anticipated...Enron used artificial problems to cause shutdowns, making supplies tight" (2006: 98). Elsewhere, as shown in Figure 4, prices grew dramatically as well. Meanwhile, FERC failed consumers by ignoring what was happening "in the belief that nothing was really wrong with the market. While the federal regulators might be accused of aiding the president's friends, it

seemed more likely that they had simply come to believe too much in their own rhetoric about the virtues of competition" (Weil 2006: 106).

Also of concern was electrical reliability. Partly as a result of the manipulations of Enron, California experienced the infamous "rolling blackouts" of summer 2000. Then, the blackout on August 14, 2003, left about 50 million consumers in the dark, some for days. According to Weil, these incidents were a result not of transmission service per se, but rather were due to the problems inherent in practices created by the market deregulation, from failure to properly trim trees surrounding infrastructure to the competing interests of industry and government regulators. "The U.S.-Canada investigators found that the 2003 outage shared many characteristics with earlier blackouts...The electric industry and the government that regulates it failed to meet their basic responsibilities" (Weil 2006:122).

Nonetheless, as a result of the 2003 blackout the perception grew that the transmission reliability of the grid needed real fixing. "Our grid is antiquated. It needs serious modernization," said former Energy Secretary Bill Richardson. As part of the Energy Policy Act of 2005, FERC was empowered with even greater authority to develop a means to ensure electrical transmission reliability. This came in the form of an alteration to the Federal Power Act, Section 216(a), which gives FERC the responsibility of conducting transmission congestion studies and outlining corridors within which it is believed that reliability may soon be compromised. As a result of a Congressional finding in 2005 that "where there is a will for power, we will find a way," these corridors were originally given the acronym NIETZSCHE, which stood for National Interest Electrical Transmission Zonal Securitized Corridors of High Energy, which was later shortened to the less cumbersome NIETC, or National Interest Electrical Transmission Corridors. These corridors featured prominently in the battle against the company New York Regional Interconnect, Inc. (NYRI) that took place from 2006-2009 in upstate New York. And, according to Weil (2006:135), they may be

unnecessary: "If the 2005 [EPAct] law results primarily in the construction of new lines and not in the imposition of binding operational standards, the message of the blackout of 2003 will have been missed. Yet, that might happen."

At this point, the arguments turn to the practical implementation of policies like the 2005 EPAct and NIETC, so it will be valuable to turn to the second aspect of electric transmission that can inform this case study of NYRI, the controversy over the techno-scientific merit of technologies involved in local, regional, or national change, and efforts made at these levels to fight them.

Techno-scientific controversy regarding electric transmission

I suggest that as an idea energy is both amoral and ambiguous. It takes on a quality of utility or of morality, of evil or good intent, only in context." – Howard M. Jones, *The Age of Energy*

Transmission lines have been the site of study for science and technology investigators before. Mazur (1981) has looked into the dynamics of technical controversy and one of his case studies centered on large transmission lines installed in central New York State in 1977-1979. This transmission line, and the case surrounding it, became known as "Marcy South," due to its path from Marcy, New York, near the city of Utica, to its southern terminus over 200 miles south in East Fishkill, Duchess County, New York. In this case, Mazur identified several motives related to four chief objections of activists, namely that construction of the lines would promote nuclear plants, that utility companies were not acting in the public interest, that certain elected officials were not properly performing the duties of their offices, and that negative health effects could result from extremely low frequency electromagnetic waves (ELFs) emitted by high voltage power lines (1981:37).

The latter issue of ELFs was the subject of investigation by Mazur to examine how scientific facts mesh with human values. In his test case, two doctors from the Veteran's Administration Hospital in Syracuse, New York, had objections on technical grounds to the lines based on the idea

that ELFs could have biological effects with long-term exposure. Technical witnesses for the utility vehemently disagreed with this notion, and claimed that the allegation was vague and untestable. In his research, Mazur was interested in seeing if a "science court" model could have a benefit in clarifying the factual positions of the adversaries in this case (experts who, in some cases, regarded each other with enmity) (1981: 38).

After accumulating and, to some extent, clarifying the factual information from the value-laden assertions, Mazur found that he could go no further. "It was not possible to bring the experts together to debate their positions on factual issues; the pro-line experts as a group did not want any sort of involvement in a science court procedure" (1981: 41). The idea of a science court was anathema to them. "The concept of a 'Science Court' is foreign to the scientific method," they said. "The adversary approach is anti-science."

In this case, it was the proponents of development that objected to debating the scientific disagreements regarding health effects of ELFs. According to Mazur, this was, in part, "because it publicizes and perhaps legitimizes...criticism of the lines. Why, after all, enter the debate if it is more likely to improve the relative position of the other side...?" (1981: 42).

This response emphasizes the political nature of technical controversies. Typically, political goals trump the technical aspect of development, which is largely assumed to have been worked out ahead of time. By the time a technology is put into practice, the "bugs" should have been worked out. However, technical systems have a way of introducing emergent properties into their practical applications that could hamper human health. Whereas opponents of the transmission lines would like to have had some certainty that such emergent properties of high voltage power lines were not going to crop up, technical experts were more likely to shrug off such concerns as tactics used by adversaries to draw out the public hearing proceedings interminably. Furthermore, the "loaded" quality of statements made by both parties muddied the waters and demonstrated the political and

normative nature of each side in the controversy. In the end, the permitting authority of the State of New York granted the utility access to the route and the lines were built shortly thereafter.

A few years earlier, another power line struggle was going on in Minnesota. This case was outlined by the late Senator Paul Wellstone and Barry Casper, in *Powerline: The First Battle of America's Energy War*. The case showed how, even within the regulatory framework of the 1970s, utilities were the planners, decision-makers, and doers, whereas regulators reacted to plans, approved decision-making, and permitted action. This passage from Wellstone outlines the degree to which this relationship exists:

Regulation tends to be only weakly coupled to the decision making process. The utilities make the plans; the regulatory agencies react to those plans, usually after they are well along. The utilities have access to information and expertise; the regulatory agencies frequently have to rely on information provided by the utilities, and tend to be understaffed and overloaded. This leads to a special relationship between the regulators and regulates, with shared assumptions about what is appropriate and what is possible (Wellstone and Casper 1981:6).

This case was known as the CU project, an acronym for the utilities who conceived it (Cooperative Power Association and United Power Association, both of Minnesota). Great latitude was taken by the companies while making decisions regarding the 430-mile route that transmission would take. More importance was given to bureaucratic computer models of routes and expertise regarding technical specifications than to communities and people along those pathways, and this was a cause of great distress for those whose lives were to be disrupted by the actual transmission lines themselves. But, of course, from the planner's perspective, no resident will want such lines "in their backyard." The not-in-my-backyard, or NIMBY, attitude of community activists must certainly be regarded as an expected, if annoying, part of the process for planners of large-scale technological developments. The fact that is a mere annoyance and not a measure of greater concern over the project being planned is telling.

Permitting of the CU project was finally settled in 1978 and the power lines began to be built. Yet, despite being heard by administrative law judges in the legal proceedings leading up to permitting, hundreds of farmers still rose up in anger and went into the fields to stop the surveying. They were met by over 200 state troopers. "For months," writes Wellstone, "the attention of Minnesotans was riveted on dramatic confrontations in the fields. The national media came to cover the weaponry and tactics of a spectacular new front in the energy war—as angry farmers deploying tractors, manure spreaders, and ammonia sprayers confronted lines of troopers armed with guns and mace in the deep snow and bitter cold of a Minnesota winter" (Wellstone and Casper, 1981:4). Protests continued for years, sometimes turning violent as "bolt weevils" took down towers and "wire worms" splayed powerlines.

The degree to which public outrage and protest defined the CU project heightens an appreciation for the need for a public process to be integrated into large-scale technological development. Ironically, Minnesota in 1974 had changed state law to recognize the necessity of gauging environmental impact, thus creating the Environmental Quality Council, and planning for long-term energy policy and creating the Minnesota Energy Agency. This changed "the criterion for deciding whether a powerline should be built, from 'public purpose' (a condition automatically satisfied by utilities), to 'public purpose' *plus* a determination by the Energy Agency director that the powerline is needed" (Wellstone and Casper, 1981:21). Yet, despite oversight by these new agencies under the jurisdiction of a new law designed specifically to take all of the decision-making power out of the hands of utilities, the outcome was still unsettling for both protesters and the powers that be alike. Governor Rudy Perpich was overwhelmed by the issue, saying "It took more time and effort than the next five things, you know. Get up in the morning and just wonder, just what's going to happen that day" (Wellstone and Casper, 1981:5).

The lessons outlined by these cases of techno-scientific controversy in electrical transmission development are clear. First, the political life of such large-scale technological development projects often overwhelms the technical or factual reality of the projects. Second, where factual assessments from experts are required to buttress political arguments, questions intrinsically related to public welfare that are not easily answered may not be considered. Third, where public protest emerges, it can often overwhelm interests and powers of the state and of utilities. "A potent new force – rural Americans – has something to say about what the energy policy should be," says Wellstone, "and they may have discovered a source of power that will make all America listen." That power lay in the organization of social activists embattled in transmission controversy. And a new tool has recently been given to activists to enhance that power – the Internet.

Social activism in the age of the Internet

"The sociologists are going to love the next 100 years." - John Dvorak, PC Magazine

According to DiMaggio et al (2001), Daniel Bell appears to have been the first sociologist to write about the social impact of digital communications media themselves. "Bell predicted that major social consequences would derive from...what Harvard's Anthony Oettinger dubbed 'compunications' technology. Anticipating the democratization of email and faxing, as well as digital transmission of newspapers and magazines, Bell explored the policy dilemmas these changes would raise. He called the social organization of the new 'compunications' technology the most central issue for the postindustrial society" (2001: 309).

In fact, postindustrial politics do seem to be changing, partly as a result of new media. Clark and Rempel have noted eight characteristics of post-industrial politics, which include multiple references to new media. Most important to this discussion is point five, that public political

discussion gains in influence. "Those who can slant public discussion their way (e.g. via the media) can better spread their views to others, thus helping their favored causes. On a given issue, a given side's impact on public discussion rises as that side exhibits greater (1) citizen passion, (2) organized activism, or (3) possession of competitive resources, such as money, staff, political contacts, or access to the media" (Clark and Rempel, 1997: 13). These characteristics—passion, organization, and resources—were key parts of the protest against the NYRI transmission line proposal. It is possible that they were enhanced by the new media used by activists involved in this controversy, new media that offers a two-way, interactive opportunities for discussion and debate within the movement, creating the virtual version of Goffman's "interaction order" (Lemert and Branaman 1997) necessary to net the three characteristics vital to its success.

The importance of new media is central. New media involve "burgeoning computer networks, including the Internet and commercial on-line services, that offer immediate access to information on an endless variety of political topics. And these are still in their infancy. How large are media effects? Assessment is complex..." (Clark and Rempel, 1997:23). But, having grown from infancy in the 1990s into toddlerhood today, new media are beginning to be better understood as case studies demonstrate its relationship to citizen politics.

In *The Power of Identity*, the second book of his *Information Age* trilogy, Castells (1997) tells of the "first informational guerilla movement" using the Internet by the Zapatistas of Chiapas, Mexico. "The Zapatistas' ability to communicate with the world, and with Mexican society, and capture the imagination of people and of intellectuals, propelled a local, weak insurgent group to the forefront of world politics" (1997: 79). While not a post-industrial society (and perhaps *because* of that fact), the Mexican Zapatistas movement employed an information technology to successfully advance their political agenda. "Essential in this strategy was the Zapatistas' use of telecommunications, video and computer-mediated communication, both to diffuse their message

from Chiapas to the world (although probably not transmitted from the forest), and to organize a worldwide network of solidarity groups that literally encircled the repressive intentions of the Mexican government" (1998: 80). Using new media, this movement was able to capitalize upon the passion, organization and resources necessary for its success.

Another case in which the Internet has been used effectively to organize against government control is the Falun Gong case in China around the turn of the century. Falun Gong, a Chinese spiritual ideology and practice was created in 1992 by Li Hongzhi, had gained credibility and size through 1997, when teaching centers around the world were connected via the Internet. "By the summer of 1998, [Falun Gong] had established a comprehensive cybernetwork linking... teaching centers, as well as many individual practitioners, and exercised control over the flow of content. The extent to which this cybernetwork played a critical role in the mobilization of practitioners from many provinces and cities to converge on Beijing and Zhongnanhai on April 25 1999 remained unknown" (Lin 2001: 223). This was likely to be the first time since the inculcation of the Chinese Communist Party in 1949 that a gathering of such size had occurred outside the awareness of party officials.

Suspected of organizing, Li was taken into custody by the Chinese government and asked how he kept in touch with his alleged one billion followers. He replied: "Not any direct channels, because as you found out that here was a conference and so I found out too. Why should I say that we all know what is happening anywhere? Everyone knows about the Internet; this thing is very convenient throughout the world" (Lin 2001: 224). In response, the government went on the offensive, shutting down several Internet and e-mail services, and there were reports that the Falun Gong websites were being hacked. They vigorously attacked the ideology of Falun Gong and Li in published dailies. On July 29, 1999, a new website was started by *People's Daily* dedicated to "unveiling Falun Gong, for the Health and Life of the People" (Lin 2001: 224). This case

demonstrates how ideological belief can influence action and organizing even within the context of a repressive regime. As John Gilmore famously observed, "the Internet perceives censorship as damage and routes around it" (Brown et al 2009).

Another long-time observer of virtual communities is Howard Rheingold, one of the first to write ethnographically about virtual community (Rheingold 1993). More recently, he has written about the power of social networks using new media to create movements similar to those of the Zapatistas and Falun Gong. Rheingold (2002: 157) describes a spontaneous "movement" in the Philippines in 2001 organized by cell phone Short Message Service (SMS) messaging (more commonly known today as "texting"), bringing over a million demonstrators to the central square in Manila to protest the presidency of Joseph Estrada. They were successful in their attempt to oust the leader. In 1999, protestors fighting the World Trade Organization at the "Battle of Seattle" used "swarm techniques," organized instantly through laptops and cell phones to evade the hierarchical organization of the riot police awaiting them. In Iran, more recently, texting and Twitter (a brief messaging service utilizing the Internet) has been used to oppose the presidency of Mahmoud Ahmadinejad and to bring awareness of this protest to the outside world (Kramer 2009).

Such use of the new media to controvert traditional means of social organization and politics is becoming more and more common. So it is not unexpected that such technologies of communication would be used in the context of a transmission line controversy in the U.S. Though not a political revolution, such social activism using new media show that even in a country that generally respects human rights and freedoms there is a place for public organizing and democratic process. Here, however, the context is technological, not ideological. Nonetheless, the same principles apply. The key is the interactive nature of the new media. "Web proponents... insist that the Internet will enhance the quality of political discussion and the viability, meaningfulness, and diversity of the public sphere by lowering the access barrier to meaningful public speech. No longer

is it necessary to own a newspaper or television station to participate: The Web is a two-way medium, and every Internet receiver can be a publisher as well" (DiMaggio 2001).

One source of power of the new media comes from the strength of the social networks that develop within them. Another comes from the depth and breadth of information made available by the Internet. Garrett (2006) notes that "new Information and Communication Technologies (ICTs) afford a variety of capabilities that can be used to augment a person's ability to integrate and retain new political information, thereby facilitating increased participation."

Garrett (2006) continues by identifying three ways in which ICTs allow for a greater availability of participation. "First, new ICTs make it possible to offer on-demand access to current information... Second, new ICTs allow multiple, overlapping associations between materials... Third, ICTs allow the creation of a flexible information environment, in which an individual may tailor how he encounters content so that the experience best suits his learning style." On-demand access, overlapping associations, and tailoring content are three modes of use of new media to be looked for in the NYRI case.

Another question that remains to be asked is, what are the characteristics of those who would adopt new media for social activist purposes? Clark and Rempel suggest generally that post-industrial political activism is related to those who are young, well-educated and non-religious because of their "relatively weaker ties to traditional family and social institutions. Young persons are especially responsive to the new because of their recent socialization" (1997:14). With respect to activists specifically, however, Mazur suggests that "groups tend to be of middle age or older, they are of both sexes, they are relatively well-educated, and they were often active in other public affairs before becoming involved in their technical controversy" (1981: 46). With respect to the use of information technology, DiMaggio et al (2001:311) propose that "broad evidence suggests that two gaps, the advantage of men over women and of the young over the old, have declined as the

technology has diffused and become more user-friendly." Gaps between racial and ethnic groups are less well understood, with some researchers reporting an increasing divide while others see the gap in the adoption of information technology to be decreasing.

Given these three conclusions, it might be expected that adoption of new media toward the end of political activism should not be hampered by factors of age or sex, but may be revealed upon the categories of race and ethnicity, education, and religion. Demographic survey data about the activists involved in the NYRI powerline controversy will help to reveal how this case fits into this set of expectations.

NYRI and the Internet

"Look there, friend Sancho Panza, where thirty or more monstrous giants rise up, all of whom I mean to engage in battle and slay." – Miguel de Cervantes, *Don Quixote*

The beginning of the New York Regional Interconnect (NYRI) case came for the general public on March 30, 2006, NYRI, when the company announced that it was proposing to build a 400,000 volt HVDC electrical power transmission line to span eight upstate New York counties from Marcy, New York (near Utica, in Oneida County) to Rock Tavern, NY (in Orange County, part of the lower Hudson Valley), a distance of roughly 190 miles. The towers would range from 80 feet to 110 feet in height and would be placed every 1/8 mile along the route. A long stretch of the proposed route follows the New York Susquehanna and Western (NYSW) railroad, owned by the Delaware Otsego Corporation headquartered in Cooperstown, New York.

According to their website (www.nyri.us), "NYRI is owned by a consortium of investors with broad experience in managing energy and other infrastructure assets and investments. The consortium includes Borealis Infrastructure Management, a subsidiary of one of Canada's largest pension plans, and American Consumer Industries (ACI), an investment holding company that specializes in environmentally sensitive power generation technologies and applications." At the

organizational head of NYRI in 2006 was President and Chief Executive Officer Richard Muddiman. Muddiman is also President and 50% owner of American Consumer Industries (see Figure 8). Projected to cost nearly two billion dollars, the eighteen investors in NYRI, Inc., are unknown, with one exception, Borealis Infrastructure (www.nyri.us).

This case study involved a participant observation of technical controversy generally. Specifically, I focused on the use of the internet to advance social activism designed to challenge the established order of business in electrical transmission permitting. The chief difference between this case and the earlier Marcy South case are to be found in the existence of new media used to synthesize a vast amount of information. This synthesis created the conditions to satisfy Clark and Rempel's three categories of post-industrial "persuasion politics": passion, organization, and resources.

When NYRI went public with their plans, they unveiled a website using the (then) latest in web development technology (including Adobe Flash "Actionscript"). The site featured a stick figure man at the top walking across a room and plugging a cord into an outlet, at which point the main (informational) part of the site "lit up." The designers clearly knew how to capture the attention of a web surfer. This was a slick design – a little too slick for my liking.

The STOP websites

Having some experience in web coding myself, and faced with the prospect of having an extremely large high voltage powerline constructed within sight of my front yard, I set about creating a challenge website, to at least bring to the attention of citizens and the establishment that someone was paying attention. Although specters of black vans running me off the road crept into my mind, I researched available website addresses and arrived at www.nyri.info. (nyri.com and nyri.net had been taken by unrelated third parties with the same acronym). The acronym I chose

for my NYRI webpage was "New York *Resists* Interconnection" and I added tabs for action, maps, pictures, a petition and a message board.

Living in a small village at the edge of Madison and Chenango counties word travels fast and it came to me through the grapevine that a public meeting was being held at the local library by individuals interested in discussing their objections to the proposed power line. Many were property owners near the proposed route. Others had fought the Marcy South line years ago or were concerned about economic drawbacks or health risks. The group that met decided to create a name and, eventually, to incorporate, officially becoming STOP NYRI, Inc. It was decided that the "New York Resists Interconnection" website could be a valuable tool for the dissemination of information and I added to the NYRI.info website the domain name STOPNYRI.info shortly thereafter. Another website journalist covering events in Hamilton, New York, exposed the NYRI issue extensively on his website www.RadioFreeHamilton.com.

The online petition was eventually signed by over 3,000 people, which helped in the creation of an email distribution list with which we could share our information. Email addresses were also being collected at farmer's markets other local events. The website message board became a popular place to share ideas until it became the target of pornographic spam attacks, at which point it became unmanageable to continue. This was a disappointment and points out a weakness of local volunteer activism: limited time and resources. Many thousands of man (and woman) hours were collectively put into activism and volunteers were endlessly coming up with ideas for how to continue bringing public awareness to the perceived threat. Yet, in my own experience and certainly that of others, it was often a struggle to find time that could be sacrificed. Yet, sacrifice they did. This demonstrated great passion on the part of the early core group, most of who remained with the group until the end.

Citizen passion was clearly indicated in the first few months of the engagement with NYRI. A full and detailed account of this engagement can be found in my previous topic paper, *The Country and the Grassroots: Rural action for local control of energy policy and development* (Reymers 2008). I will include here some detailed instances which exemplify the development of citizen passion, organization, and possession of competitive resources necessary to maintain the opposition.

One example of this involves regulated public meetings that had been arranged by NYRI at five locations along the proposed route. A strong effort was made to inform many people of these meetings in order to influence them to show up and thus reinforce the idea that that resistance was widespread. This effort included notice on the website and through an email campaign that was being generated from the STOP NYRI group. I attended one to publicize the new website for STOP NYRI, Inc., and to observe the reactions of the community to this perceived invasion. On the whole, the mood was angry and people were upset. About two-hundred people looked in on the meeting from outside the school cafeteria windows where it was held in Norwich, New York, on May 11, 2006. The fire chief was strictly monitoring attendance and the building was filled to its capacity, leaving many outside.

Here, the first impression made by the company was one of either disregard or disdain for the communities they were approaching. William May, General Manager for NYRI, seemed intent on explaining the technical need for and specifications of the proposed powerline, but the citizens only wanted him to speak to their concerns over economics, eminent domain, health, safety, property values, and the like. But rather than being allowed to raise their hands and ask questions, the NYRI representatives requested that all questions be filled out on small green cards and submitted to them in writing. This form of social control was frowned upon by the crowd as unrepresentative of the hard-hitting questions that they wanted to ask, face to face. The crowd became unfriendly. At one point I took a straw poll, asking how many people in the audience was for the proposed line –

no hands went up. "How many people are against it?" I inquired. Nearly all hands moved skyward. I took that opportunity to plug my website. Later, two young men, both of whom had the appearance of local farmers, approached me to let me know that if anything need be done about bringing the towers down, they were "my guys." Had they heard of the "bolt weevils" and "wire worms" of the Minnesota powerline struggle of the 1970s? Probably not, but they certainly were echoing the same sentiments.

Political representation appeared at that first local meeting as well, for instance with the presence of New York State Assemblyman Clifford Crouch. He owned property adjacent to the proposed route as well, and was clearly interested in sympathizing with the public outrage. At that meeting, interested parties met and shook hands, and they reinforced the information already provided on the websites regarding the process of permitting, the specifics of the NYRI proposed routes and line technology, and who their local, state and federal representatives were. This began the organizational phase of the campaign which led to a regionalization of the movement.

At the same time that STOP NYRI was organizing in central New York, the southern tier region, closer to the southern terminus of the proposed powerline, also had started a public awareness campaign regarding the perceived threat to the Upper Delaware River region, particularly about an area of the river that had been designated as a U.S. Wild and Scenic River in 1978. An already existing group, the Upper Delaware Preservation Coalition (UDPC), had perceived the threat of the NYRI powerline proposal very shortly after the March 30 public unveiling of their plans. They used their preexisting website and email infrastructure to make NYRI a central issue of the coalition.

Also emerging early in the challenge to NYRI was a small group of committed Sullivan

County (also southern tier) citizens who created a website with the name STOPNYRI.com. They had

registered the domain name just a few days before the decision was made by the Madison and

Chenango county group to incorporate as STOP NYRI, Inc., and it was to all of our surprise (and chagrin) that the web name had been taken. Access to the information through an easy-to-remember web address was considered important. However, it was considered to be a divisive move to ask them for the name, so nothing was to be done. Since *nyri.info* already existed it was deemed that this would be the address placed on the brochures, lawn signs, T-shirts, flyers, etc. that were to come. Meanwhile, the programmers creating STOPNYRI.com did a great job of automating their site so that users could register and receive email updates and

Neighbors to the north of Madison County near Utica were also quick to organize, creating a group called *Upstate New York Citizens Alliance* (UNYCA), and they too created a website to provide information about the NYRI challenge. More groups and associated websites were to come. *Say No to NYRI* emerged near Otisville, NY, the *Chenango Greens* (a local branch of the green political party) dedicated resources and blog space to the NYRI issue, *StopThePowerlines.org* was created, a blog for information sharing and response.

It was soon realized by all that a loose network of sites was emerging, with many sites borrowing facts, statistics and arguments from one another, though each also addressed the particular stakes involved in their local areas. Out of this common recognition came the first "Regional Congress" of activists in May 2006, an event ultimately taking place in Norwich, New York, a small city roughly central to the proposed powerline route (roughly a one and a half hour drive from each terminus of the route). This Congress represented one of the first movements toward coalition building for individual citizen groups which had emerged. This represented an important step for the general movement if it were to remain cohesive. Again, email communication was central to the organization and timing of this conference (43 emails with the subject heading "Regional Congress" appear in my folders between May 12, 2006 and August 22, 2006), and publicity was created through the websites created by each group.

At the same time that the Regional Congress was being organized, an alternative group had organized composed of the leaders of each of the activist groups and representatives from each of the eight counties that the proposed powerline transgressed. This group took the name Communities Against Regional Interconnect (CARI) and this was deemed to be the politicallyconnected arm of the movement. It was this group that led to the establishment of the third aspect of post-industrial activism, possession of competitive resources. The NYRI company had revealed that their investment amounted to a huge \$1.6 billion. This involved the hiring of technical and regulatory experts, permitting authority consultants, lawyers, PR firms, and so forth. What chance did activist groups reasonably have in competing with this company when they were holding bake sales and holding out the can at the local farmer's market? It was clear more was needed. This is where the political connections became vitally important. By the end of 2006, CARI had convinced each of the counties to contribute fifty-thousand dollars to hire lawyers in the fight against NYRI. Using email, fax, phone, and letter writing campaigns, the State legislature was also pressured to match the combined contribution of the counties, bringing a total during the campaign of nearly two million dollars promised by the government and private organizations to CARI. Despite a budget crisis, parties made good on most of those promises. The beginning of the legal battle was underway, as it was understood that this would eventually characterize the larger effort to stop NYRI.

This understanding did not come automatically. Huge amounts of information were passing over the Internet, some very specific and very valuable, other information less so. For instance, largely through the email conversations and the websites (including the NYRI.us website), it came to be understood that the permitting process of the New York Public Service Commission (PSC) was defined by Article VII of the regulatory code. With this understanding, parties who were communicating by email could develop strategy and share not only written information, but photographs, maps, video, and so forth. The form of the communication was important, but perhaps

even more vital was the intersection of forms. Following is an example of the kind of interplay between these different forms that occurred between the groups to accumulate a case against NYRI:

```
>> [Identity Removed]:
>> I have just had a chance to look at [Identity Removed]'s photographs
>> (on the Radio Free Hamilton web site) comparing the perspectives of
>> photos in the NYRI Article VII application with what fairer views of
>> the same locations would show. In my judgment this is the kind of
>> evidence that could be powerful in the Article VII trial. It does
>> not merely show that the particular NYRI photos are misleading. This
>> kind of evidence supports an argument that NYRI generally lacks
>> credibility; simply put, people who would submit misleading photos of
>> this sort can't be trusted with respect to anything else in their
>> application.

[Identity Removed]:
[Identity Removed] is part of our STOP NYRI group. I will make sure that
the CARI attorneys see these photos and put them in contact with
[Identity Removed] to ensure their usefulness in the PSC proceedings.
```

Websites, digital photography, email and the conventional organizing strategies of face-to-face contact converged in creating this challenge to NYRI's Article VII case. This example demonstrates the use of on-demand access, overlapping associations, and the tailoring of content, three qualities of Internet activism recognized as important in previous research (Garrett 2006).

The significance of this example is not that this could not be done without the Internet.

Certainly, photographs and regulatory procedures were available to the public in previous cases.

The significance in this case is that the Internet was used to *fuse* these resources between the network of local movements that had emerged.

The Article VII procedure eventually started in August 2008, after three instances in which the application of NYRI was denied by the PSC for various reasons including insufficient alternate routing options and a lack of adequate economic and environmental assessments. These reasons were brought to the attention of the administrative law judges at the New York Public Service Commission (PSC) by the CARI lawyers. These delays, and the strategy that created them, supported the morale of activists and, in the style of a positive feedback mechanism, gave fodder for

the websites and emails that sustained the movement. While participation ebbed and flowed, it was the continued efforts of local citizens that kept the political connections and monies flowing so as to support the legal effort hired by CARI within the context of the Article VII hearings.

On April 3, 2009, the lawyer for NYRI, Leon Singer, announced that the company would withdraw its permitting application from the New York State PSC Article VII process, claiming that the Federal Electric Regulatory Commission (FERC) had not allowed them a guaranteed rate of return on their project that could sustain the operations. Activists immediately saw this as a victory and celebrated formally together just over a month later. Currently, however, the NYRI corporation still exists and some activists believe that they are biding their time for more favorable economic and regulatory conditions. The proceedings were being broadcast via the web, so it did not take long for the actual scene of the activists' victory to appear virtually on their computer screens. The victory, NYRI's voluntary withdrawal, was considered complete given that they would have to again go through a complicated Article VII application process should they wish to reinitiate their bid. NYRI, in the meantime, claimed that the withdrawal was due to the fact that "the Federal Energy Regulatory Commission (FERC) on March 31 denied our request to review the rules it recently approved for transmission tariffs ...creating a situation where even if our project were to be sited by the PSC, NYRI would face the prospect of being unable to recover its costs for the transmission line." This was viewed by many activists as an excuse, hiding the reality that the scrutiny placed on the technical details (flaws) of questionable practices (such as the photography example above), all couched in the proper administrative procedures of the PSC understood by the CARI lawyers.

The NYRI activism survey

Demographic and qualitative information was collected to assess the anti-NYRI movement with respect to characteristics of age, sex, income, education, race, and so forth, as well as use of communications technology in their involvement with the movement. Fifty-eight respondents

completed at least part of the ten question survey administered to over two-hundred individuals contacted by email using existing lists of those related to all of the activist groups.

There was no large difference in the reported sex of the respondents, although females outnumbered males (fifty-two percent female to forty-three percent male, with five percent giving no response). However, there was a clear pattern in age of the respondents. The largest single age group response was 50-59 (forty-percent). Thirty-four percent were 60 or older, whereas only twenty-six percent were under 50. No respondents reported to be under 30. This is consistent with Mazur's (1981) finding that activists tend to be middle age or older, but contradicts the general expectation of Clark and Rempel (1997) that post-industrial citizen politics will be engaged in by larger populations of young people. Mediating factors in this variable could include the rural geographical region of the NYRI activists or the "digital divide" (unequal resources required to participate, particularly in activities related to Internet activism requiring computer and broadband access).

The factors of race, politics and education also showed a clear trend. Race was clearly distributed toward white (eighty-eight percent), with one respondent reporting "Native". No other racial-ethnic categories were chosen (ten percent did not respond). Again, regional variation can account in part for this result; the ethnic distribution of the eight CARI counties is majority Anglo-Saxon. Likewise, politically the region is majority Republican in registration. Would this be reflected in the results or would the factor of activism moderate the Republican advantage? Or would the stereotypically leftist model of the activist be revealed? In fact, the political results were generally evenly distributed, though with a marked drop off on the extreme right (see Table 1).

In regard to education, over three-quarters (seventy-six percent) reported having completed a 4-year college degree. Over a third (thirty-six percent) had completed a master's degree (nineteen percent) or doctorate (seventeen percent). Likewise, household income was

"Left-leaning liberal"	28%
"Middle-of-the-road liberal"	26%
"Independent"	21%
"Middle-of-the-road conservative"	14%
"Right-leaning conservative"	7%
Table 1	
Reported Political Affiliation of NYRI Activists	

higher than the U.S. average (which is approximately \$50,000), with the median response being \$70,000 - \$79,000. Of those who responded to the income question (which was seventy-nine percent of all respondents), nearly three-quarters (seventy-four percent) of respondents reported having incomes of \$50,000 or above. Significantly, one-third of respondents reported incomes at \$100,000 or above. Employment figures mirrored the income figures, with nearly three quarters (seventy-two percent) of the respondents reporting they were employed for wages or self-employed. The other one-quarter reported being retired.

The county of primary residence of the respondents was predominantly within the eight county region of the proposed powerline (eighty-four percent). Chenango, Delaware, and Madison counties were roughly equally represented (each near twenty percent), with Oneida County not too far behind (sixteen percent). However, nearly 1 in 6 respondents (sixteen percent) reported another county as their primary residence, ranging from just outside of the proposed route (Putnam County, Cortland/Tioga County) to as far away as Michigan.

With respect to attitudes toward the NYRI issue, responses were revealing. In response to the question, "Please rank your concerns to the NYRI issue in order of their importance," with six alternatives, the first and second ranked concerns were "Local Environmental Consequences (rivers, swamps, watersheds, viewsheds, etc.)" and "Economic Consequences (rate increases, property devaluation, disinvestment, etc.)." The local character of the individual groups with respect to both public and private property (given the threat of eminent domain decisions) was

clearly a common impetus for the larger movement. The third and fourth ranked concerns were "State's Rights Consequences (PSC vs. FERC, permitting decisions, federalism, etc.)" and "Health Consequences (EMFs, links to cancer, etc.)." At the bottom of the concerns regarding the powerline proposal were "Global Environmental Consequences (CO2, coal energy, conservation threats, etc.)" and "Homeland Security Consequences (old technology, terrorism danger, etc.)." Five percent of respondents reported they felt "No concern" over threats from NYRI.

Respondents were asked if they participated in a group during the NYRI issue. Seventy-one percent reported group participation and twenty-eight percent reported no affiliation. Of those who participated in a group, representation was broad-based, but somewhat skewed toward the Chenango-Madison county group, STOP NYRI, Inc., with thirty-eight percent of the respondents reporting from this group. It is uncertain whether this is due to relatively higher levels of participation and support within this group, or to the strategy by which the research population was sampled (email lists). Nonetheless, all groups were represented with the exception of the Upper Delaware Preservation Coalition.

Also indicative of participation levels, respondents were asked "How frequent was your participation in the group?" Results showed roughly a third participated rare or occasionally, a quarter were regular participants and seven percent participated on a daily basis. Qualitative responses show the self-reported group roles to range from "member," "interested citizen," and "financial contributor" to "president," "strategic adviser" and "co-chair."

Forms of participation ranged from sending letters, posting lawn signs and signing petitions to speaking at hearings and meeting directly with top politicians (one reports direct meetings with Senator Hillary Clinton). One interesting response notes that the respondent "ran [an] informational blog, co-organized local information events and protest gestures, fundraised, created an inter-library-wide packet for the cybernetically disconnected..." This "packet" (each composed of

two full 3-inch binders, featuring in part NYRI's entire application to the PSC) still sits in local libraries. This demonstrates again the interconnection between offline and online forms of activism.

In the qualitative responses, many activists outlined their prior political or technical expertise (Mazur 1981). There were engineers, local politicians, lawyers, sociologists and others who leant valuable expertise to the discussion, much of which was shared via new media. For example, the following respondents outlined their expertise in response to the question "Did you participate in any other way(s) in the NYRI issue?" The examples which follow demonstrate their expertise and political connections:

- "Active party in PSC and FERC procedures; personal visits to Sen Clinton and Sen Shumer [sic] offices, filed testimony at state and federal information gathering sessions";
- [I] "helped to organize a community rallies that included Rep. John Hall, Orange County Exec. Ed Diana, state senators John Bonacic, Wm. Larkin, Assembly members Annie Rabbit and Aileen Gunther. Worked to convince the town council to contribute to CARI":
- "I prepared a file for the County Board of Supervisors alerting them that NYRI had filed with the DoE and gave them a heads up regarding the filings through the FERC... and other info";
- "I met with a sub-committee of the county board of supervisors and informed them of important websites and as well as providing links to paper work that NYRI filed through the DOE and DOT. I believe I was able to provide information to the board to help them act as a governing, elected body should. I spoke with the Public Service Commission as well as Legislators on this issue";
- An engineer familiar with the technical specifications outlined by NYRI wrote "Did thorough technical review of NYRI application. Assessed technical and economic weaknesses of NYRI plan. Authored white papers in key areas to define strategy and talking points to defeat NYRI and provide strategic and tactical direction. Acted as technical sounding board for STOP-NYRI";
- A co-chair of STOP NYRI, Inc., (both a lawyer and farmer by trade) had recently left a political constituency supporting economic development in a neighboring college town, expecting to settle back into a quiet life on the farm (which is directly adjacent to the route proposed by NYRI for their powerline).

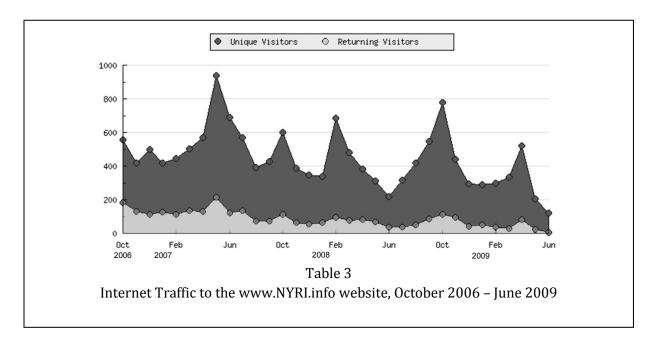
Most of these examples confirm Mazur's expectations that activists are "often active in other public affairs before becoming involved in their technical controversy." It is only speculative, but it is possible that the availability of information provided by the Internet could have had a possible

Website checked	% of respondents who visited	% of visitors who "weekly" or "daily"
STOPNYRI.info (Chen./Mad. co)	62%	39%
RadioFreeHamilton.com	52%	34%
STOPNYRI.com (Sullivan county)	41%	21%
StopThePowerlines.com	40%	22%
UDPC.net	38%	14%
Other online newspaper/blog	38%	64%
www.UNYCA.org	34%	25%
ChenangoGreens.org	34%	10%
SayNo2NYRI.com	33%	0%
Other website	21%	41%
Table 2		
Frequency of visitation to NYRI issue websites		

effect upon direct contact between citizens and their representatives. As mentioned, new media used by activists included email, cell phones, and the World Wide Web (www). Ninety-one percent of respondents report using email, showing the importance particularly of email to the communications between activists. The next most widely used communications technology was the www (seventy-six percent), followed by newspapers (sixty-percent), telephone-landline (forty-three percent) and cell phones (twenty-two percent). Fourteen percent specifically reported using online blogs and newspapers. It is likely that the rural and regional aspects of the proposed powerline route were linked to the heavy use of email and the www as primary tools for communication

Among the different websites that respondents used, they ranked in terms of respondent visitation as follows in Table 2. Like group affiliation, these figures may alternatively reflect different levels of participation and support between the different groups (with an activist group identifying with the website that most directly reflects their interests), or it may reflect the strategy by which the research population was sampled. Among other online newspapers mentioned by the respondents were the Utica (NY) Observer-Dispatch (www.uticaod.com), The Daily Star from

Oneonta, NY, (www.thedailystar.com), 9wsyr.com (a TV news station out of Syracuse, NY), the New York Times (www.nytimes.com), and Google News (searching for "NYRI"). Among other websites mentioned by the respondents were the CARI website (www.caricoalition.org), the PSC (www.dps.state.ny.us), NYISO (www.nyiso.com), FERC (www.ferc.gov) and USDOE (www.energy.gov) web sites, and the corporate website of NYRI itself, www.nyri.us.



It is interesting to see the ebb and flow of traffic on the STOPNYRI.info website. Table 3 shows increased traffic in unique and returning visitors at five distinct points between October 2006 and June 2009. Those points correspond to distinct events in the history of the NYRI battle, such as the moment in May 2007, when the National Interest Electric Transmission Corridors (NIETC) hearings were taking place in New York City or in April 2009 when they withdrew from the permitting process.

The mass media covered NYRI in fair detail, particularly when exposed by local media. As the coverage came from more distant media outlets (from New York City or Washington, for instance), frequency and veracity diminished. Major national media outlets did cover the issue (for example, CBS Evening News, National Public Radio, FOX News, the New York Times), but the stories

were brief and misrepresented certain facets of the issue. Nonetheless, it was exciting and gratifying to see a local issue mentioned at the national level and for local activist groups to see their identity revealed to the country.

The final questions on the survey related to the level of satisfaction respondents felt with the activist effort and if they would participate again if needed. It also offered the opportunity to leave general comments. In these sentiments, respondents revealed more details regarding their opinions and attitudes about the NYRI issue. Answering the question, "Please rank what you believe to be the most important pressures that led to the withdrawal of NYRI's application," by far the first ranked response was "Public pressure from the organized citizen groups, with CARI at the lead," which ranked well ahead of the second response, "Government pressure from elected officials (Congress, the Senate, etc.)". Following just after this reason, tied for third ranking, were the responses "Public pressure from individual citizens (letter writing, fax campaigns, etc.)" and "Government pressure from non-elected officials (FERC, DOE, etc.)". Last in the ranking of reasons for the withdrawal of NYRI's application was "Private economic pressures of the Wall Street investment firms." It could be argued that there was a bias at work here, especially given the reason for the withdrawal stated by NYRI, that it was due to a negative FERC ruling. Presumably this ruling fostered direct action by investors to withdraw the application. The bias introduced is that of meaning and immersion in the activism: it would be difficult indeed to admit, after much hard work, that some other cause of the demise of "the enemy" was responsible.

Noting particularly the role of elected officials, it was state and local officials who were largely credited with supporting the activist's positions. Two thirds of respondents believed that local and state elected officials "responded adequately to the NYRI power line issue." However, federal elected officials did not fare as well; the verdict was evenly split, with twenty-eight percent agreeing and an equal number disagreeing that they "responded adequately." A larger forty-one

percent reported they were "not sure" in answer to this question. Clearly, activists believed they had an impact at the local and state level, but were uncertain whether they had reached the halls of the federal government in their appeals to stop NYRI.

Qualitative comments reveal greater vacillation on the part of respondents regarding the cause of NYRI's withdrawal. Other pressures noted were the "global economic collapse," "the downturn," and "the rate issue." Economic forces seemed to be on people's minds in these responses. One respondent wrote a somewhat lengthier answer to this question: "The last question is very difficult to answer. I believe all of these items contributed to NYRI's withdrawal and that many were synergistic. It's hard to rate one stronger than the others. Also, I never really felt I knew what NYRI was doing and why, and I still wonder if they will resurface." These comments point out that broader political-economic conditions can have a strong impact on local, grassroots activism.

In general, the respondents' comments revealed a sense of both success and cynicism, as well as an impending sense of the continuation of the struggle. One respondent noted that "I feel that it would be important to fight it down again if it arises." Another says, "I'm more cynical than I was before. I used to have more trust. It also took time away from my family. Was it worth resisting?----Yes. Would I do it again?---not sure." Yet another simply comments, "I don't think we have heard the last from them." These sentiments express the variable feelings regarding the inevitability of new power transmission and the possible return of a company deemed locally to be, in a theme the activists pushed as a slogan in the midst of the campaign, "unnecessary, unwise, and unfair."

Discussion

The subtitle to Wellstone and Casper's (1981) book *Powerline*, on the Minnesota transmission line case of the 1970s, is "The First Battle of America's Energy War." It has been thirty years since that first case, with little attention paid as a national priority to "the grid." But now, in

times defined by climate change, fluctuating oil prices, "peak oil," terrorism, piracy, and blackouts, attention has returned to our energy future. President Obama has called for the creation of a "smart grid" that can more efficiently distribute electrical load, meaning upgrades to existing lines or the installation of new ones. "Green," renewable technologies are being considered, particularly large solar and wind "farms," from which electricity will need to be routed, meaning the development of a larger and more robust transmission infrastructure.

It could be said that the New York Regional Interconnect (NYRI) case is the second battle in America's energy war. And the central front could be considered to be the Internet. As an informational throughput, it is useful. But perhaps more important is the way it acts as a social web, creating a fusion of people with specific knowledge of places, persons, or events in a way that allows the viral spread of information to become strategically and tactically important. To this end, though attempts were made, NYRI ultimately failed to produce the kind of "viral marketing" (Rushkoff, 1996) that other successful businesses have created (such as Burger King's "subservient chicken" or Cadbury's YouTube Gorilla campaign). At the opposite end of this front were the forces of local, grassroots activists who, using volunteer labor and limited technical expertise developed email lists and a web ring of virtual resistance sites passionately devoted to stopping a perceived infraction on their real territories, connecting people together with ideas, evidence, and conviction about how to stop a multibillion dollar corporation from trammeling over their lands. While the outcome of this war is yet to be determined, it could be said that the second battle has been decided.

If decisions are soon to be made at the federal level regarding transmission siting and permitting, more battles could emerge. As with the Minnesota CU and the Marcy South cases, lessons can be taken from the outcome of the NYRI case. First, new media played a significant role in the behavior of the NYRI activists. Particularly, email and the World Wide Web were widely

adopted as information tools and connection hubs. The interaction between virtual and face-to-face meetings was tangible. Internet technologies were found to "augment a person's ability to integrate and retain new political information, thereby facilitating increased participation" (Garrett 2006). This might have been a key to sustaining the movement for as long as it went on (three years) and for connecting citizen and politician in ways not thought of in the past.

Second, the demographic categories of age, education, and income noted by Mazur (1981) and DiMaggio et al (2001) were found to be consistent with this past research. While Clark and Rempel (1997) suggest that political activism might be heightened in the younger age groups, this was not found to be the case in the NYRI activism. This may be due to the fact that a central issue within the battle involved land rights, and land ownership is a factor that increases directly with age. It would be unexpected for a 20-year-old to own tracts of land in the path of NYRI's proposed powerline, and so other political issues such as "rocking the vote" or volunteering for VISTA might be more within their scope of activism.

Third, it is useful to see activism in light of its stages of development. Three levels of activism have been identified by Syracuse University sociologist Allan Mazur in his study of technical controversies, including those involving transmission lines. First, "a warning is brought to public attention" (Mazur 1981: 85). This would characterize the first year of the NYRI conflict, with battle lines being drawn, websites being developed, and local meetings, bake sales, and parades being attended (many of these events became available on YouTube).

Step two, says Mazur (1981: 90), is that "the warning is taken up as a bounded protest." This is characterized by the regional coalitions that developed, all centered on a singular task: stopping NYRI. Although letters and faxes were sent to Senators Schumer and Clinton, and in some cases, personal visits were made, little was done to truly confront the battle at the federal level, as the survey results also indicate. In one case, public comment meetings on the National Interest

Electric Transmission Corridors (NIETC) organized by FERC were being held in New York City (on a Wednesday, not a particularly convenient time for wage earners to protest). Roughly thirty to forty protesters from the NYRI struggle attended, making their statements to the stone-faced FERC bureaucrats. Outside the hotel where the hearings were taking place, immediately across from Carnegie Hall, penned in by security gates and watched over by the NYC police, protest signs were held high and chants were heard – "N.I.E.T.C. – Bad For You Bad For Me!", "Hey Hey Ho Ho, Corridors Have Got To Go!", and "No Designation Without Representation!" But as we made our way to Central Park to eat lunch, then returned to the bus to make our way back to quiet, rural central New York, many commented on the seeming futility of it all. The bureaucracy loomed large in the face of thirty protesters – on that day it seemed as tall and foreboding as the prominent, shadowy New York skyscraper across from our protest pen.

The third step in social activist movements, according to Mazur (1981:93) is the creation of a mass movement. Large, recognizable movements that have done this are the environmental movement, the animal rights movement, or the nuclear disarmament movement of a past era.

Mazur describes the two cases similar to NYRI:

In 1977 farmers in both Minnesota and upstate New York began protests against very high-voltage electric transmission lines which were to run across their lands...Throughout the controversy the protest remained bounded, being limited to fairly well-defined groups at the two sites; there was not even much communication between the Minnesota protestors and those in New York (1981:93).

The fact that the local groups in New York and Minnesota did not significantly connect could be due to the fact that the information technology of the time was insufficient to produce such connection. New media obviate that problem. In the NYRI case, the weak coalition of the "Regional Congress" and the stronger coalition of Communities Against Regional Interconnect (CARI), represent the possibility of connection to larger, national organizations involved in energy politics. The network of groups working on these issues includes the Piedmont Environmental Council (an organization

helping in a similar transmission battle developing in northern Virginia) and the Mid-Atlantic Concerned Citizens Energy Coalition (MACCEC), a group which has also been fighting the FERC ruling on NIETCs. "A coalition of local protest groups is one of the two pillars of most successful national movements," says Mazur (1981: 94). "The other [is] a strong effort in Washington to influence policy through federal courts, Congress, and the agencies and departments of the Executive Branch." This latter objective is yet to be fulfilled if the larger concerns over the future of energy policy are to be addressed based on the experience of local protest movements such as STOP NYRI. This broadening of scope is what some of the STOP NYRI activists are speaking about now that NYRI has withdrawn its permitting application. Comments such as the following reveal some trepidation about America's "energy war":

- I do not think the issue has gone away. FERC is still an opportunity for NYRI.
- I fear that they are still lurking in the shadows, waiting for an opportunity to pounce. They are waiting for a new loophole, a new regulation or any way to come back and try again. We won for now, but they are still out there.
- It is a shame that NYRI was viewed as a threat that is defeated; it is not. It is also disturbing that no real consequence in local energy use awareness seems to have fallen out of the recognition that consumption patterns amenable to conservation are viable in the short term to obviate the justification for more NYRI's. I wonder what the mindset will be when the local windmill farms "need" a transmission line?
- Given the laws as written, Energy Act, lack of a NYS energy policy, the power of FERC, sadly I don't see this as the end. More than likely we'll be seeing the likes of NYRI or similar org attempting a similar act.
- If it is even a small possibility that it would arise again it would be met with greater resistance. It would have ruined my property value and my retirement home where I am peacefully enjoying the last few years I have with my yard projects. I am 75 and don't need a negative impact to my tranquil lifestyle. I love the quiet, serene countryside where I live and enjoy the opportunity to live with the positive results of my 35 years in public education. America is all about being unencumbered by "big government" or "big brother" or "big corporations." I am the little old man who loves this great nation for all the reasons NYRI tried to demolish.
- Policies are put in place with no thought as to who will be impacted. Right now, lots of wind turbines are going up. Now there are many arguing that new transmission lines need to be built to deliver that energy... Did anyone bother to think about these issues? NYRI was (and is) a very non-transparent group. They must have been encouraged by others, but those "others" were never identified. Has it gotten to the point where we are just "puppets" for the rich and powerful; we are to be children that must not know the truth? If that is the case, how very sad for the future of this country.

These statements show that some people feel that reform at the federal level is necessary. Ultimately, if a mass movement is to develop at the national level, it will take the networking of existing disparate coalitions around the country to each other. Should this occur, the Internet and other new media will no doubt play a central role. It is clear from this study that the information and networking tools that the Internet provides, those of ondemand access, overlapping associations, and tailored content, facilitated the connection of passionate and devoted volunteers who organized into a bounded social movement, typical in demographic characteristics of past activist movements, that was able to acquire significant resources and make important political connections to influence the outcome of this electrical transmission permitting process. Furthermore, it is clear that the activists are concerned that future action may be necessary, and the new media may also have a role to play in the creation of a new, national movement centered on what has been characterized as America's emerging "energy war." Of course, even a national movement may not have enough momentum to stop the changes that are coming with respect to America's energy infrastructure. It may turn out that citizen activism on this issue could simply amount to tilting at windmills. The soil for a national movement is fertile – whether or not one will grow is ultimately up to the dedication and commitment of activists and the size of the obstacles that are put in their way.

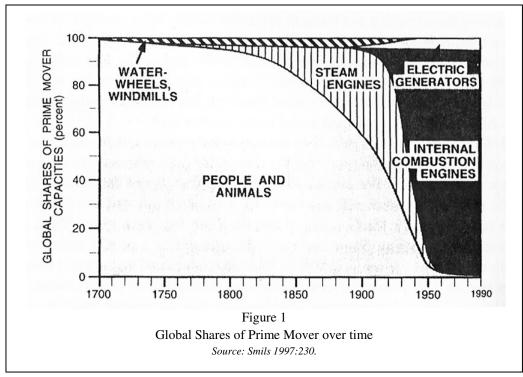
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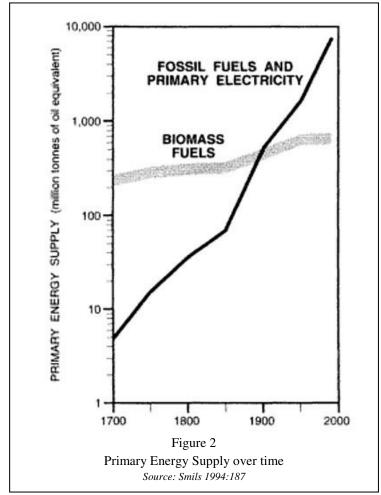
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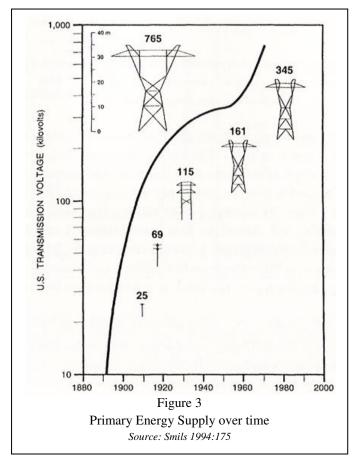
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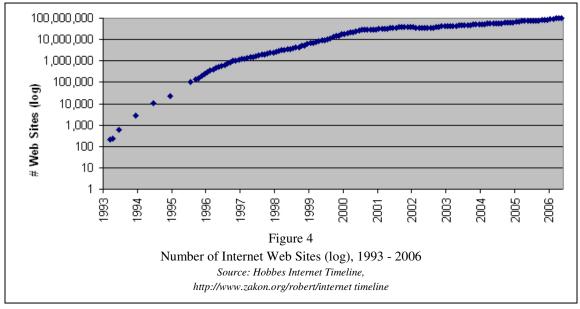
FIGURES 1 - 2





FIGURES 3 - 4



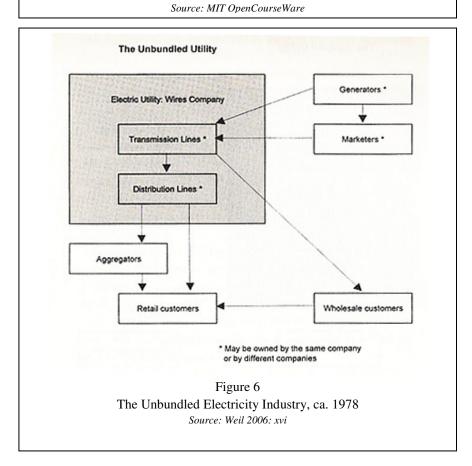


FIGURES 5 - 6



Hayti, Missouri. Member of the U.S. Rural Electrification Administration (REA) cooperative at the annual meeting. Rothstein, Arthur, 1915- photographer. Created/published: 1942 July, Library of Congress reproduction number. LC-USW3-006592-D DLC (b&w film neg.) Digital ID: (intermediary roll film) fsa 8d07508. Source: MIT OpenCourseWare, http://ow.mit.edu/OcwWeb/History/21H-126 America-in-Depression-and-WarSpring2003/RelatedResources/detail/lec3images.htm

Figure 5
Rural Electrification Administration Cooperative, Hayti, Missouri (1942)



FIGURES 7 - 8

