

# "NEW HAMPSHIRE IS NOT YOUR EXTENSION CORD:"

## Understanding Opposition to Transmission Lines in Northern New England

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### ABSTRACT

New England represents a critical arena for imagining the multiple scales and geographies of energy transition. To the south, the densely-populated states of Massachusetts, Connecticut, and Rhode Island power the regional political economy and increasingly aspire to expand their reliance on low-carbon energy sources. To the north, Hydro-Québec, Canada's largest hydropower producer, stands poised to increase its hydroelectric production and electricity exports to the northeastern United States as it envisions its future as North America's "leading provider of clean energy." Citizens of northern New England, however, have argued that this vision for regional energy transition leaves them the role of "extension cord." This paper analyzes grassroots opposition to the Northern Pass project, a proposed high-capacity transmission line that would have increased imports of Québécois hydroelectricity to southern New England. Drawing on interviews and from discourse and material analysis, this paper argues that opposition to Northern Pass was motivated by complex notions of stewardship, solidarity, resistance, and contestation that, rather than simply standing in the way of energy development, work to imagine more just futures for this transnational energy system at multiple scales obscured by accusations of NIMBYism, or the Not-In-My-Backyard movement.

*Key words: Transmission Infrastructure, Power Lines, Rural Energy Transition, NIMBYism, Discourse Analysis*

### Introduction

New England represents a critical arena for imagining the multiple scales and geographies of energy transition. To the south, the densely-populated states of Massachusetts, Connecticut, and Rhode Island power the regional political economy and increasingly aspire to expand their reliance on low-carbon energy sources. To the north, Hydro-Québec, Canada's largest hydropower producer, stands poised to increase its hydroelectric production and electricity exports to the northeastern United States as it envisions its future as North America's "leading provider of clean energy" (Hydro-Québec n.d.). Citizens of northern New England, however,

have argued that this vision for regional energy transition leaves them the role of “extension cord” (see, for instance, Savage 2018; Protect The Granite State n.d.)

This paper documents grassroots opposition to the Northern Pass project, a proposed high-capacity transmission line that would have increased imports of Québécois hydroelectricity to southern New England. Amidst the most contentious permitting process ever to come before New Hampshire’s Site Evaluation Committee (Forest Society 2017), opponents of Northern Pass formed an eclectic coalition united in opposition to the project and its corporate backers. Why was Northern Pass so widely opposed in New Hampshire?

In answering this question, this paper fills several gaps in previous energy geography literature by addressing the significance of electricity transmission infrastructure (Bridge et al. 2013; Huber 2015; Calvert 2016) and considering the particular role played by, and imagined for, rural communities in energy transition (Marsden 2016; Jefferson 2018; Naumann and Rudolph 2020). This study also critiques the ways in which the Not-In-My-Backyard movement (NIMBYism) is used as a blanket explanation for opposition to energy projects, building on arguments previously focused on cases in Western Europe (e.g. Burningham 2000; Devine-Wright 2013a), and applying them to the particular sociopolitical contexts of transnational energy systems in Québec and New England. This study agrees with this body of literature that accusations of NIMBYism in popular discourse (and, by extension, in some academic work) obscure more nuanced attachments to place and sociopolitical positionalities. In place of NIMBYism, this paper argues for a more productive analysis of opposition to energy projects that centers notions of the “backyard” as a potential site for energy justice, rather than as bastions of privilege.

Drawing on interviews and material analysis, this paper argues that opposition to Northern Pass was motivated by complex notions of stewardship, solidarity, resistance, and contestation that, rather than simply standing in the way of energy development in the “backyard,” work to imagine more just futures for this transnational energy system. Four dominant discourses emerged in opposition to the project: (1) a need to preserve the natural heritage of New Hampshire; (2) a sense of solidarity along the proposed route as well as north into indigenous territories in Québec; (3) a resistance to the dominance of corporate utilities; and (4) a desire for a more democratic and distributed energy future for the region. Opposition to Northern Pass was therefore driven not (merely) by self-centered concerns over property values and viewsheds, as NIMBYism generally assumes, but by humanistic attachments to place and community and by sociopolitical solidarities against unilateral energy planning by corporate powers. However, these solidarities and subjectivities operate at scales obscured by accusations of NIMBYism.

The paper concludes by considering the implications of opposition to Northern Pass for the future of energy in New England. Instead of viewing northern New England as an “extension cord” between Hydro-Québec and Massachusetts, Northern Pass underscores the significance of transmission geographies for successful energy transitions and emphasizes that rural communities are key stakeholders to be consulted, rather than obstacles to be traversed. This, in turn, pushes analyses closer to issues of justice than those of privilege assumed by popular accusations of NIMBYism.

## New Geographies of Energy?

Much of what is “new” about the new geographies of energy is not only the transition towards lower-carbon energy sources, but the emergent spatial patterns and sociopolitics associated with changes to broader energy systems (Zimmerer 2011; Bridge et al. 2013; Huber 2015; Calvert 2016). Because these changing energy geographies are occurring against the backdrop of existing socioecological landscapes, they inevitably introduce new and exacerbate existing uneven power dynamics that complicate notions of a just energy transition (Bridge et al. 2013; Huber 2015; Calvert 2016). Framing energy transition as a distinctly spatial process foregrounds the extent to which past, present, and future energy regimes are themselves, as Bridge et al. (2013, 33) argue, “geographies of connection, dependency, and control.”

The emerging literature on just energy transitions considers the political and infrastructural changes necessary to shift from fossil fuels to renewable energy sources, and situates these changes within larger questions of energy, environmental, and social justice. Given the political, economic, and ecological importance of energy systems, justice within transitions is a multifaceted goal. Prior research has explored just energy transitions in such diverse dimensions as elite power (Mayer 2019; Sovacool and Brisbois 2019), scale (Bouzarovski and Simcock 2017), settler colonialism (Willow 2016), centralized vs. distributed systems (Burke and Stephens 2018; Levenda et al. 2018), and urban-rural dynamics (Kelly-Reif and Wing 2016; Marsden 2016; O’Sullivan, Golubchikov, and Mehmood 2020). Of particular interest to this project is the geographic unevenness of energy transitions: as O’Sullivan, Golubchikov, and Mehmood (2020, 6) argue, “low carbon energy transition highlights how energy is interwoven within spatially organized uneven power relations” in a way that is “reflective of already uneven spatial distributions of social, economic, and political power.” Transmission geographies provide an important site for exploring this unevenness. For most communities, a large-scale shift in the energy system will manifest spatially in the form of new transmission infrastructure, rather than new forms of energy extraction, generation, or consumption, because the locations where carbon-intensive energy is extracted and generated will likely be distinct from the sites of either large-scale low-carbon generation or small-scale distributed generation (Naumann and Rudolph 2020).

Conflicts over pipeline construction are perhaps the most salient of these new transmission geographies, as in the case of the Keystone XL, Dakota Access, and Kinder Morgan pipelines. Both pipelines and power lines work to connect disparate people and places, bringing new peripheries into existing energy systems (Cidell and Lechtenberg 2016; Lawlor and Gravelle 2018). Pipelines and power lines embody the distance between urban and suburban centers of energy consumption and rural (and sometimes indigenous) spaces of energy extraction and generation (Cidell and Lechtenberg 2016; Lawlor and Gravelle 2018; Davies 2019; Simpson 2020). Because of the capital required to develop longitudinal transmission projects, both pipelines and power lines tend to embed the power of large corporate entities at the expense of smaller-scale, community, or household energy production (Bridge, Özkaynak, and Turhan 2018). For these reasons, especially in the North American context, both pipelines and power

lines can be situated within broader settler colonial projects, and conflicts around siting – particularly around pipelines – has elevated movements for indigenous sovereignty (Bosworth 2018; Simpson 2019).

At the same time, however, there are key differences between pipeline and power line geographies. For one, while there is some discussion of land rights (particularly around rights-of-way) and indigenous rights around power line conflicts, these have not generated the same salient movement for indigenous justice as have the Keystone XL or Dakota Access pipelines, for example (for exceptions to this generality, see discussions of energy infrastructure and First Nations in Québec, e.g. Desbiens 2004, 2009, 2013). Beyond this, opposition to pipelines often discursively highlights the materiality of the fuel being transported, be it oil or liquefied natural gas, and the risk posed to local ecosystems and communities by potential spills (Barry 2013; Mitchell 2013; Bosworth 2018, 2019; Lawlor and Gravelle 2018). In contrast, because power lines transmit electricity rather than liquid fuel, opposition may be more focused on the physicality of the infrastructure rather than the materiality of the energy, as discussed in greater detail below. This is reflected as well in the framing of transmission development: while emerging pipeline projects are often justified as necessary to transport fossil fuels to market, new power line projects are increasingly proposed as part of renewable energy transitions, casting power line infrastructure in direct contrast with pipeline development (Bridge et al. 2013; Huber 2015; Calvert 2016). Longitudinal power lines, therefore, are discursively produced as both essential infrastructure for energy transition and as an investment *against* pipelines and other forms of carbon capital. This framing, in turn, may have implications for the ability of protesters to gain solidarity from other actors who might otherwise be sympathetic to questions of energy justice.

Longitudinal power lines have historically been understudied relative to other geographies of energy extraction, generation, transmission, and consumption (Soini et al. 2011; Healy and Barry 2017), with much of the previous research conducted by industrial psychologists or engineering consultants concerned with factors such as perceptions of risk and height acceptability, rather than more social constructivist concerns such as place attachment (Furby et al. 1988; Priestley and Evans 1996; Soini et al. 2011; Healy and Barry 2017). Furthermore, because large-scale generation of low-carbon energy is land intensive, these new systems of generation and transmission are liable to be situated in primarily rural areas (Marsden 2016). However, as Naumann and Rudolph (2020) argue, energy studies has largely failed to substantively engage with rural studies and vice versa, despite rural areas being critical for successful energy transitions, leading to a general dearth of rural theory in energy geography (see also Marsden 2016; Jefferson 2018). Taken together, this lack of attention towards longitudinal power lines and the rural landscapes through which they are routed further obscures the significance of the transmission question and the perspectives of rural stakeholders in energy transitions, particularly in the North American context.

A major exception to this pattern is the body of work on transmission lines in rural areas of the UK and the Nordic countries, especially in conjunction with a rise in the construction of both on- and off-shore wind farms (Benediktsson 2007; Newson 2010; Cotton and Devine-Wright 2011; Gant, Robinson, and Fazal 2011; Cain and Nelson 2013; Keir and Ali

2014; Keir, Watts, and Inwood 2014; Batel and Devine-Wright 2015; Devine-Wright 2015; Mueller, Keil, and Bauer 2017; Stefánsson, Sæþórsdóttir, and Hall 2017; Lienert, Sütterlin, and Siegrist 2018). Much of this scholarship has been concerned with NIMBYism, a catch-all term used to describe local opposition to infrastructure projects, usually in wealthier white communities. Calls of NIMBYism generally presume that privileged communities oppose development near their homes – that they would otherwise support in other areas – because of self-centered concerns, such as visual aesthetics or property values, which are juxtaposed against issues surrounding the urgencies of climate change, for instance, or the historic and ongoing environmental racism towards communities of color. However, many recent studies, particularly in the UK, have critiqued these narratives of NIMBYism commonly used by the popular press, politicians, developers, and some academics (see Burningham 2000; Wolsink 2000; Hubbard 2006; van der Horst 2007; Devine-Wright and Howes 2010; van der Horst and Toke 2010; Bridge et al. 2013; Devine-Wright 2013b, 2013a; Burningham, Barnett, and Walker 2015, 201; Eranti 2017). These authors raise important points that question the assumptions inherent to criticisms of NIMBY behavior: for instance, Burningham (2000, 65) points out that “attempts to protect one’s own backyard are inevitable and perhaps even environmentally positive.” Speaking pragmatically, Bridge et al. (2013, 335) argue that “understanding place attachment and the emotional responses that people can have to energy landscapes provides a more productive approach than simplistic assertions of NIMBYism for analyzing conflicts over energy landscapes.”

## Framework

Discourse analysis is a useful tool for untangling complicated and often conflicting environmental imaginaries. Because rural landscapes maintain conflicting roles as sites of resource extraction, environmental preservation, prospective development, urban and suburban escapism, and rural livelihoods, contested decision-making around these landscapes often becomes entangled with contested relationships with the landscapes themselves. For authors like Woods (2003, 287), an attention to discourse is useful for contextualizing conflicts between natura-ruralist and utilitarian perspectives of windfarm development in rural Wales: “to understand the coalition-building and campaign organization, the motivations of participants, the representations and arguments, and the ultimate outcome, the researcher needs to understand the complex negotiation of discourses of nature, landscape, environment and rurality which frame collective and individual actions.” Similarly, in their analysis of the socioecological construction of working forests in the Northeast, Wolf and Klein (2007, 989) argue that a focus on discourse can reveal “the essence of [a contested issue] as represented by underlying assumptions, the values or stakes recognized by the actors and the priorities they attach to the various considerations that structure the problem.” Discourse analysis, then, becomes a powerful tool to unravel the contested environmental politics, place attachments, and value judgments associated with prospective infrastructural development in rural areas (see also Adams, Perrow, and Carpenter 2004; Takala et al. 2017).

## Methods

This study seeks to analyze the discourses through which members of the opposition understood and articulated the prospective impacts of Northern Pass on the landscape. In rejecting NIMBYism as a blanket explanation for opposition to a plan framed by its opponents as a renewable energy project (e.g. Burningham 2000), this paper begins from the assumption that oppositional discourses were legitimate and suggestive of more complicated attachments to place, landscape, stewardship, and sociopolitical solidarities than stereotypical NIMBY values of property values and viewsheds (cf. Daley et al. 2017; Devine-Wright 2011; Batel and Devine-Wright 2015; Eranti 2017; see also McCarthy 2002).

After receiving IRB approval for this project, research was conducted primarily between June 2018 and May 2019, following the refusal of New Hampshire's Site Evaluation Committee (SEC) to grant Northern Pass its permit but before the SEC's decision was upheld by the New Hampshire State Supreme Court. Given this project's focus on discourse, the bulk of data comes from interviews. The primary purpose of these interviews was to determine the stake of each interviewee in the Northern Pass Project, to elucidate different understandings of place, to capture different environmental and place-making narratives, to explore the environmental and energy politics that arose around the project, to convey the lived experiences of individuals involved and impacted by Northern Pass, and to understand different framings used to understand the project. These interviews provided both humanistic and sociopolitical narratives about the opposition that together tell complex stories about attachments to the natural landscape, solidarity against what was seen as heavy-handed corporate energy planning, and (at times surprising) social and political resistance strategies. Because of the expertise that many of the interviewees acquired during the ten year permitting process, the interviews also fleshed out the complicated empirical history of the project. These interviews were complemented by analyses of materials ranging from Eversource press releases, Hydro-Québec sustainability reports, to anti-Northern Pass road signs, as well as guided tours of the proposed route.

Semi-structured interviews were conducted with a pool of twenty individuals, seventeen of whom were official intervenors in the SEC process (official third parties with an eligible stake in the permitting process, for instance property owners abutting the proposed route). The first wave of interviewees was identified from the official list of SEC intervenors, primarily representatives of local NGOs with public contact information. From this initial pool, a snowball process was used to identify a second wave of interviewees, in order to take advantage of the grassroots nature of the opposition. This second wave primarily included private citizens and local, county, and state government officials. Interviews were conducted in person, with the exception of one held over the phone, and lasted an average of one hour; all but one consented to be recorded. Recordings of the interviews were transcribed and analyzed using Atlas.ti, where they were coded for discursive patterns and mentions of particular topics, such as landscape preservation, historical preservation, coalition building, renewable energy, corporate bullying, SEC reforms, and energy futures. These codes were used to identify the four core discourses discussed in greater detail below.

Five of the interviewees represented state, regional, or national NGOs headquartered in Concord, NH; eight lived in and around the area of the White Mountain National Forest; six lived in northern Coos County; and one worked with the Pessamit First Nation in Québec. Of these, five were current or former elected officials representing municipal, county, and state governments. While Northern Pass stood to impact a wide swath of the state, the interview pool reflected a focus on New Hampshire “north of the notches,” an area loosely corresponding to the White Mountain National Forest and northwards into Coos County, which has a higher proportion of protected landscapes and fewer existing miles of right-of-way, and where opposition to Northern Pass was particularly strong. (In the map provided in Figure 1 below, the portion of the route in Coos County extends northwards from Dalton and Whitefield.)

As part of these interviews, stakeholders provided me with tours of the proposed route of the line, in Sugar Hill, Easton, Franconia, Bethlehem, Stewartstown, and Pittsburg. My observation of the route provided a grounded understanding of the current extent of infrastructural development in the area and contextualized the proposed impact of the overhead lines and the buried sections.

Interview and observation data were complemented by analysis of material artifacts produced by members of the opposition, including flyers, maps, pamphlets, websites, newspaper articles, op-eds, buttons, t-shirts, bumper stickers, roadside signs, banners, documentaries, political satire, and political advertisements. Photographs of these artifacts and of sites along the proposed route were also uploaded to Atlas.ti and coded using the same schema.

## The Northern Pass Project

Northern Pass was a proposed 192-mile high voltage direct current (HVDC) power line, designed to carry 1090 MW of electricity from Québec, south through New Hampshire to its eventual customers in Massachusetts. The project represented a joint partnership between Hydro-Québec, a for-profit corporation wholly owned by the province of Québec, and Eversource, one of the leading energy providers in New England. Amidst protests that lasted throughout the ten year lifespan of the project, Northern Pass eventually agreed to bury roughly sixty miles of the line, primarily the section passing through the White Mountains National Forest, an important tourist destination popular with hikers, as well as in northern Coos County, where it faced difficulty acquiring rights-of-way. A map of the project is given in Figure 1.

Northern Pass began its planning in 2008, following the passage of Massachusetts’s Global Warming Solutions Act. In 2016, Massachusetts’s Energy Diversity Act called for a formal request for proposals to deliver upwards 9,450,000 MWh of energy to the state, operational by 2022. The proposal decision committee eventually selected Northern Pass as its first-choice candidate in January of 2018 (for a more detailed history, see Autery and Silverstein, this issue). While a full discussion of the merit of Hydro-Québec’s electricity as “renewable,” “clean,” and “green” energy is outside the scope of this paper (though see Autery and Silverstein, this issue), it is worth contrasting Hydro-Québec’s electricity mix – 99.6 percent of which came from hydroelectric production in 2019 (Hydro-Québec Sustainability Report 2019) – with



- Delivery of 1,000 MW of clean, reliable hydropower to New Hampshire
- Increased underground route to 60 miles
- No view impacts in the White Mountain National Forest, Appalachian Trail and Franconia Notch areas
- Use of advanced cable technology with fewer, lower and streamlined structures



Figure 1. Final proposed route, including aboveground and buried sections. Image from Northern Pass LLC and reprinted with permission.



Massachusetts' existing energy mix, where roughly two-thirds of electricity generation came from natural gas in 2020 (Energy Information Administration 2020).

Interviewees described how opposition to Northern Pass arose soon after the plan began its initial planning processes. Several state, regional, and national NGOs emerged as important information-brokers for the opposition, mostly notably the Society for the Protection of New Hampshire Forests (Forest Society), and some municipal or county governments were especially active in disseminating legal information, such as Grafton County. Key early victories were secured in the state legislature with broad bipartisan support, for instance revising state eminent domain code to exclude elective transmission projects. However, most of the opposition consisted of individual intervenors (as well as those who were not eligible to intervene in the SEC process) who coordinated via email listservs, online forums, and word-of-mouth. While NGOs were able to solicit some funds to back the opposition, with the Forest Society in particular fundraising to purchase conservation easements to block the initial route through Coos County, most individual intervenors paid out-of-pocket for the costs of surveying their properties, attending SEC permit hearings, and the production and distribution of anti-Northern Pass materials.

In 2014, opponents of Northern Pass were able to enact major reforms to the New Hampshire Site Evaluation Committee (SEC), the state body responsible for issuing permits to energy projects in the state. These reforms formalized the criteria for successful permits, most notably requiring that projects be found to not unduly interfere with the orderly development of the region. Northern Pass submitted its SEC application in October of 2015, and over the course of the next three years, the SEC received an unprecedented 160 motions to intervene; testimony from 154 witnesses; and 2176 exhibits over seventy days of official hearings. In February of 2018, shortly after Northern Pass was formally selected by Massachusetts, the SEC unanimously voted to reject Northern Pass's proposal. Northern Pass appealed the SEC's decision, which was later upheld by the New Hampshire State Supreme Court in July of 2019, effectively killing the project.

Despite its rhetoric of renewable energy and improved energy independence and security for the region, then, Northern Pass was overwhelmingly opposed in New Hampshire, especially in the northern half of the state, a sparsely populated area with limited existing large-scale infrastructural development. Despite economic stimuli included in its Forward NH Plan, Northern Pass was widely seen by opponents in New Hampshire as a corporate project for the benefit of suburban and urban communities in Massachusetts, imposed on their communities by outside powers (see Nolan and Rinaldi, this issue), as seen in Figure 2.

Proponents of Northern Pass, meanwhile, widely caricatured the opposition as NIMBYs. Framing the project as renewable energy and critical for economic development in the state, one particularly prominent editorial in New Hampshire's largest newspaper, *The Union Leader*, argues:

Our best acronym now is BANANA: Build Absolutely Nothing Anywhere Near Anything. Every new project is opposed for some reason or another, often for any reason at all... The problem with these banana people is that they don't understand



# STOP THE NORTHERN PASS



## What you Need to Know about The Northern Pass Project

### **The Northern Pass Project will not serve New Hampshire.**

It is like a monstrous extension cord that crosses New Hampshire to supply electricity to Massachusetts, Rhode Island and Connecticut. Just 10 percent of the energy will come into New Hampshire.

### **Major environmental and conservation organizations in the state are opposed to the project.**

The destruction to our magnificent landscape will not be salvageable. New Hampshire's beautiful forests, including the White Mountain Forest, are world famous. It will take hundreds of years to replace the trees and landscape that will be destroyed by the clear-cutting and construction necessary to build the massive towers and high voltage lines.

### **This massive project is designed to fix a problem that doesn't exist.**

The state already generates more power than it uses, and electricity demand has been trending downward.

### **New Hampshire consumers will eventually pay the price on their energy bills.**

Northern Pass is really just a money making scheme for HydroQuebec and Eversource at the expense of NH consumers.

### **Claims of job creation are exaggerated and economic impact on local communities are downplayed.**

Any jobs created by the Northern Pass Project will be temporary construction jobs - unlikely to last more than two years. Chambers of Commerce representing communities along the line have opposed the project because of its negative economic impact, including harming local tourism, real estate and local energy economies.

Figure 2. Opponents of Northern Pass argued that the project relegated New Hampshire the role of "extension cord" within regional energy transitions, rather than full partner. Image from Protect the Granite State, Inc. and reprinted with permission.

that the status quo is a bad thing and needs to be changed, not preserved... We can read the numbers and realize that New Hampshire is on the verge of becoming a backwater. The dynamic state we once were is now limping along, sore and bedraggled. Stagnation and electric costs are not two different things. Reducing the cost of electricity requires having more of it. Having more of it requires building things, the infrastructure necessary to create a modern life, to power the machinery and technology that are part of well-paying jobs. (Arlinghaus 2015)

Accusations of NIMBYism specific to Northern Pass, then, presented the project as a form of progress for New Hampshire and New England as a whole, and criticized the “backyard” as a ‘backwater’ desperately in need of development. The opposition’s focus on landscape preservation, for instance, was recast as a ‘build nothing’ dogma that was pitted against the infrastructure development necessary for ‘well-paying jobs’ for the rest of the state, hinting at a class element. In the case of Northern Pass, charges of NIMBYism were less about the validity of the project for regional carbon emissions, and more about the value of the “backyard” itself.

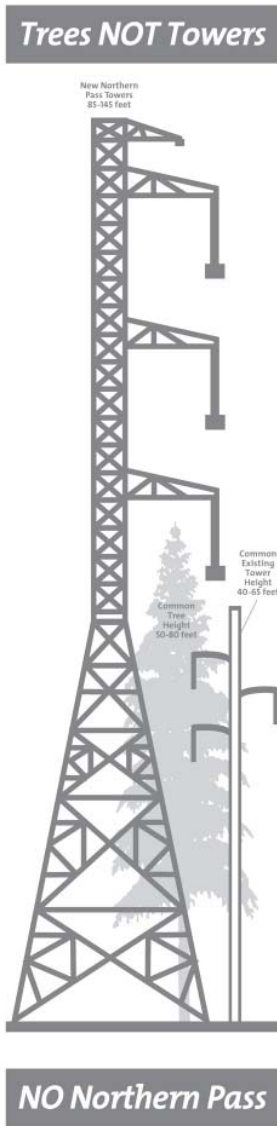
### **Trees Not Towers: Oppositional Discourses**

Northern Pass, and the Massachusetts legislation that formalized its intended market, framed itself as an environmentalist project, aimed at reducing regional carbon emissions and promoting a transition towards low-carbon energy transitions. Why, then, was Northern Pass so widely opposed in New Hampshire? Four key arguments were put forward by stakeholders in opposition to the project as proposed, all of which function at scales obscured by accusations of NIMBYism and, as Burningham (2000) argues, are ‘perhaps even environmentally positive.’

#### *Preserving the Natural Heritage of New Hampshire*

Foremost among these discourses was a sense of the “natural heritage” of New Hampshire that stood to be destroyed by the intrusion of high-capacity power lines. Epitomized by the oppositional slogan “trees not towers,” this discourse argues that New Hampshire, and particularly the northern half of the state, is no place for the scale of industrial development imagined by Northern Pass. The opposition discursively deployed the notion of landscape as natural heritage through two overlapping forms: that of the natural landscape, with its wilderness character and lack of overt human presence; and that of the cultural landscape, particularly as shaped by small-scale dairy farming, logging operations, and historic White Mountain tourism. These two discourses coproduce a sense of natural heritage that in turn embeds a broader articulation of local and state identity and sense of place.

Stakeholders expressed a fierce attachment to the natural landscape, particularly of the North Country. Of course, New Hampshire is already latticed with a system of existing rights-of-way that cut through even otherwise underdeveloped tracts of forests, though the majority of the current infrastructure in these corridors is strung on wooden poles that do not rise above the tree canopy. The refrain common among interviewees – that these existing poles are not



“taller than a pine tree,” as seen in Figure 3 – reveals that rather than being measured in terms of carbon emissions or reductions, opponents of Northern Pass viewed sustainability in terms of disruption to the preexisting landscape. This is doubly true for the land trusts and conservation organizations interviewed, who have formal and sometimes legal obligations to protect and preserve their conservation lands in their current forms in perpetuity.

In other cases, the relevant landscape is more culturally defined. The federal permitting process through the U.S. Department of Energy included compliance with Section 106 of the National Historic Preservation Act, in which Northern Pass was required to document the historical and cultural resources that stood to be impacted by the project. Rather than the historic buildings and old barns that might come to mind when imagining historic resources, however, the cultural artifact that came into question was the entire cultural landscape of New Hampshire itself, particularly after the National Trust for Historic Preservation declared the landscape of New Hampshire to be an official National Treasure in 2015. Here, the landscape that comes to matter is the amalgamation of centuries of human occupation and modification overlaid on top of the biophysical landscape, albeit one that largely ignores indigenous landscape patterns. For instance, the Sugar Hill area of the White Mountains National Forest was home to a series of historic hotels that were constructed in particular viewsheds, and preserving these viewsheds in their existing form, opponents argued, was just as critical to the historical preservation of these hotels than the protection of the buildings themselves.

Repeated in interviews is the notion that these landscapes – both natural and cultural – must be “protected,” “preserved,” and “perpetuated,” with Northern Pass described as a “scar,” “gash,” or as “destruction.” The argument that the opposition

Figure 3. Oppositional discourses measured the impact of Northern Pass in terms of its disruption to existing landscapes. Image from the Society for the Protection of New Hampshire Forests and reprinted with permission.

makes here, then, is not about climate change and impacts to regional carbon emissions, as is emphasized by Massachusetts' legislation, but rather is focused on protecting those particular landscapes that are most significant to the place attachment of particular communities. This is reflected within the interview pool itself: from conservation and preservation organizations, to second home owners, dairy farmers, and local governments, stakeholders have positioned themselves as having a vested interest in protecting their home landscapes that transcends simple property values.

### *Connecting Across the Grid*

As Northern Pass altered its route over the course of the project – angling for federal and U.S. Forest Service permits, negotiating for rights-of-way, and reacting to the outpouring of public opposition – it attempted to strategically address stakeholder concerns, most notably by agreeing to bury fifty-two miles of the line in and around the White Mountain National Forest, where there were both stronger environmental regulations and the presence of generally-wealthier members of the opposition. However, and in contrast to the assumptions of NIMBYism, there arose a discourse of solidarity across the proposed route of the line and even extending “upstream” of the project into Québec, where the bulk of electricity is generated on indigenous territories. In this way, the proposed route of Northern Pass mapped onto a new sense of solidarity across communities that spanned socioeconomic divides, political affiliations, and national borders: the scale of the social movement began to map onto the scale of the transmission geography itself.

In talking to stakeholders about why it was important to oppose Northern Pass, especially after Northern Pass agreed to bury the line in certain places but not others, these stakeholders stressed the importance of protecting the entire corridor rather than just their own backyards. For instance, when asked why it was important to oppose Northern Pass even after the decision to bury the line through her town, one resident of Sugar Hill, a wealthy town to the northwest of the National Forest, replied:

Well, what about Coos? You can't just pick and choose [between towns]. You can't let one group off the hook and still destroy the others.

This sense of cross-corridor activism also carried across the border, especially after Canadian activists had begun communicating with communities and NGOs in New Hampshire. One stakeholder in Stewartstown, NH, near the proposed border crossing, described it as:

I think with the border just nearby, it's making it clear cut between your reality on this side and our reality... I mean, that border is not so significant for people with a common goal.

This discourse of solidarity points more to the potential for collective action than the degree of hypocrisy assumed by accusations of NIMBYism, where opponents would otherwise support projects if they occurred outside of their backyards, though it remains to be seen whether this collectivity persists now that the project's permit application has officially been rejected.

### *Opposing Corporate Utilities*

As the project evolved and stakeholders increasingly criticized Northern Pass's outreach and community relations, opposition to Northern Pass became closely tied to an opposition to Eversource and Hydro-Québec and to corporate utilities more generally. Attempts by Northern Pass to utilize and expand its rights of way were seen as an attempt to "bulldoze," "snow plow," or "trample" over the landowners on whose lands the rights-of-way were granted. Another stakeholder living in Stewartstown remarked:

[Eversource] acted like, if they had to, they would buy the whole state of New Hampshire. It's a turn off. You know, they weren't trying to work with us. They were just trying to trample all over us.

This 'turn off' was echoed by the vast majority of interviewees, almost all of which used the term "arrogant" to describe their impression of Northern Pass, Eversource, and Hydro-Québec.

This was exacerbated by Eversource's deteriorating sense of credibility. Northern Pass attempted to address its loss of credibility, particularly in the SEC hearings, through expert testimony, but these experts also had very little currency. The opposition pointed to many flaws in their testimony: for instance, quoting studies on the negligible impacts of power lines on property values that only looked at urban areas; stating that they had expertise in burying high-capacity power lines in areas with cold winters when none of their cited projects had yet taken place; or promoting the expertise of a general contractor who turned out to have numerous safety infractions on record. Corporate utilities were no longer assumed to be benevolent experts in energy planning and development.

Opposition to Northern Pass points to the need to work collaboratively with communities to plan energy projects, rather than acting unilaterally, even when utilities technically possess the necessary rights-of-way. Even the most stalwart of opponents acknowledged that large energy corporations would likely be necessary to quickly shift to lower-carbon energy sources; as one official for a conservation organization remarked, "We need the Eversources of the world to get this done." Opponents argued that even more top-down approaches to energy transition must work more closely with communities, citing the example of Vermont's New England Clean Energy Link, a competing project that secured all of its permits with minimum opposition after working closely with communities, agreeing to bury the entirety of the line, and proposing a substantive Lake Champlain clean-up package.

In this way, oppositional discourses pushed for greater transparency, credibility, and inclusivity in the energy planning process, rather than taking the technocratic proposals and rationales of utilities at face value. In turn, opposition to Northern Pass has the potential for making future energy planning in the region more equitable by establishing the precedent that energy projects will not be approved without sufficient community outreach and collaboration.

### *Contesting Energy Futures in New England*

Emerging at the convergence of these three other discourses, the opposition worked to contest the vision of energy transition put forward by existing energy behemoths like Eversource and Hydro-Québec, as well as by the southern New England states that are the dominant political and economic actors in the region. These contested visions take multiple forms that might better approximate the sort of heterogeneous, distributed, and democratic energy geography imagined by energy transition.

Stakeholders pushed back against a vision for the future that retained the status quo of large, centralized utilities generating energy en masse and distributing it at a profit over long distances. In the vision of energy transition embodied in Northern Pass, existing corporations such as Eversource and Hydro-Québec would retain control over energy markets, and the spatial impact of energy transition would be disproportionately borne by rural landscapes in northern New England bisected by high-capacity transmission lines, and by indigenous communities in Québec on whose lands large hydropower presents historic and ongoing socioecological impacts (see Desmeules and Guimond, this issue). The interview pool suggests that opposition to Northern Pass may lead to some lasting shifts: interviewees spoke anecdotally about an increased adoption of home solar by opponents, while town and county governments referenced the creation and reinvigoration of town and regional energy commissions and an influx of interest and investment in town, county, and state master plans for energy development. Beyond this, oppositional discourses pushed for more radical futures: wide-spread distributed generation with rooftop solar; locally-controlled wind energy; renewed investment in biomass plants that could support local timber industries; and funding for energy conservation measures. Taken together, then, what is contested is not the need for an energy transition, but the prescribed energy futures that would protect the power and profits of a few corporate utilities at the expense of communities, indigenous groups, smaller energy producers, and more transformative ideas of energy transition.

### **Conclusions: The Future of Energy in New England?**

A more critical approach to transmission infrastructure, and energy geographies more broadly, grapples with the inevitable role that transmission infrastructure plays – and will play – in mediating low-carbon energy futures, while taking seriously the prospective impacts of energy development to rural landscapes and communities. This account of opposition to Northern Pass argues that community objections to transmission infrastructure development go beyond a narrow focus on property values and viewsheds, and that a focus on oppositional discourses reveals complex narratives of stewardship, solidarity, resistance, and contested energy futures that would be obscured by blanket accusations of NIMBYism.

With these complexities in mind, this analysis of Northern Pass aligns with previous critiques of NIMBYism that argue that NIMBYism fails to account for the “place-protective behaviors” (Devine-Wright and Howes 2010, 278) of opponents of large-scale energy projects. The reasons for this opposition are much more complicated than NIMBYism assumes, and, as Burningham (2000) suggests, might even be ‘environmentally positive’ in their ability to foster stewardship ethics, promote awareness and engagement with broader energy systems, empower distant and often marginalized actors, and actively contest energy futures prescribed by corporate utilities and other privileged entities. Rather than blocking progress and energy transition by opposing Northern Pass, this paper argues that the anti-Northern Pass activists were creating spaces for more inclusive and productive discussion of the planning and implications of regional energy transitions. The “backyard,” then, is not an obstacle to energy transitions, but a key site for contesting injustice and demanding greater collaboration, consent, and solidarity in energy projects.

Though Northern Pass has lost its appeal in the New Hampshire Supreme Court, a similar project in Western Maine, the New England Clean Energy Connect (NECEC), continues to progress through Maine’s permitting processes and appears likely to be constructed (see the articles by Frederic and McCourt, this issue). Further research is needed to understand the differences in sociopolitics between New Hampshire and Maine that could explain these differentiated outcomes – for instance, whether different patterns of land ownership in New Hampshire versus western Maine streamlined the permitting process for the NECEC. A number of other longitudinal power line projects remain active in northern New England and New York, and Hydro-Québec continues to grow its hydroelectric capacity in anticipation of increased exports (Desmeules and Guimond, this issue). It remains unclear whether transnational activism around hydroelectric development on First Nations and Inuit territories will continue and, if so, in what forms, though a number of interviewees anecdotally reported they were still in contact with Pessamit activists and had been planning to visit for the salmon spawning prior to the Covid-19 outbreak.

Northern Pass demonstrates that northern New England – despite being less populated, less affluent, and less politically-influential than its southern counterpart – may not simply consent to being the “extension cord” of Northeastern energy transition. However, it is difficult to imagine New England succeeding in reducing its reliance on natural gas without some contribution from Vermont, New Hampshire, and Maine. What is needed, then, is a not an extension cord but an extended conversation that seeks to imagine, propose, contest, and enact energy transition for the region at a broader scale and with a broadened sense of who ought to be at the table. The example of Northern Pass pushes us to consider what a less uneven geography of energy transition might look like for New England – where northern New England is not a space to be traversed, but a partner in energy planning; where local communities are not obstacles to be overcome, but stakeholders to be consulted; where power lines are not merely a means of connecting point A and B, but a reminder of our interconnected energy futures.

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