

Energy Transition Case Study: The Huntley Coal Plant in Tonawanda, New York

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About the Project

This report is part of a series of papers prepared by Resources for the Future (RFF), Environmental Defense Fund (EDF), and other partners that examine policies and programs to promote fairness for workers and communities in a transition to a low-greenhouse has emissions economy, often referred to as a just transition. The series looks at existing public policies and programs, grouped thematically as "tools in the toolbox" for policymakers seeking effective strategies to address challenges associated with transition. We focus on policies and programs that can support workers and communities in regions where coal, oil, or natural gas production or consumption has been a leading employer and driver of prosperity.

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List of Acronyms

AFL-CIO	American Federation of Labor and Congress of Industrial Organizations
ВСР	Brownfield Cleanup Program
CACWNY	Clean Air Coalition of Western New York
ECIDA	Erie County Industrial Development Agency
EDA	Economic Development Administration (US Department of Commerce)
EGFCMP	Electric Generation Facility Cessation Mitigation Program
EPA	US Environmental Protection Agency
FTA	Frontier Technical Associates
FERC	Federal Energy Regulatory Commission (US Department of Energy)
IBEW	International Brotherhood of Electrical Workers
KTUFSD	Kenmore-Tonawanda Union Free School District
MW	Megawatts
NO _x	Nitrous oxide
NYISO	New York Independent System Operator
NYPA	New York Power Authority
NYPSC	New York Public Service Commission
NYSDEC	New York State Department of Environmental Conservation
PAH	Polychlorinated aromatic hydrocarbon
PCB	Polychlorinated biphenyl
PILOT	Payments in lieu of taxes
RGGI	Regional Greenhouse Gas Initiative
RSSA	Reliability Support Services Agreement
UBRI	University at Buffalo Regional Institute
UDC	Urban Development Corporation
USW	United Steel Workers
WNYALF	Western New York Area Labor Federation

1. Introduction

The United States is undergoing an energy transition. The share of electricity sourced from fossil fuels has steadily declined over the past decade, a consequence of both growing concern over climate change and the availability of low-cost renewable energy. Coal has faced a particularly steep decline—once the source of over half of the country's electricity, it now supplies less than one-fifth (EIA 2022).

This shift away from traditional energy sources puts at risk those workers and communities for whom fossil fuel production or industrial use is a key driver of prosperity. Thus, effective stewardship of the energy transition demands that policymakers prioritize fairness and opportunity for these groups. This concept of fairness for economically dislocated workers and communities is widely known as "just transition."

Facilitating a just transition is no easy task, as the challenges facing communities in transition are diverse and deeply rooted. But as the shift away from fossil fuels accelerates, the need for effective methods of intervention—including thoughtful public policy—to address these challenges becomes acute.

The experiences of individual communities that have dealt with the loss of fossil fuel–related economic activity can serve as a valuable guide for how to pursue a just transition. This report examines the experience of one such community, Tonawanda, New York, and its process of dealing with the closure in 2016 of the C. R. Huntley Generating Station, a coal-fired electricity plant.¹ To understand the impact of the closure and how the community responded, we analyzed tax documents, pollutant reports, municipal budgets, and news coverage. We also conducted a series of telephone interviews in 2020 with the following individuals: Joseph Emminger, Tonawanda's town supervisor; Richard Lipsitz, president of the Western New York Area Labor Federation, AFL-CIO; Dave Wasiura, assistant director of the local chapter of United Steel Workers; Cindy Winland, director of strategic priorities at Delta Institute; and staff in the Office of Senator Chuck Schumer.

The Tonawanda experience provides illustrative examples of how a single facility's closure can create challenges for local government budgeting and disrupt a variety of industrial operations in the local economy—some of which may be unexpected. Tonawanda also offers insights into how a diversity of stakeholders—including labor unions, environmental advocates, and local government—can work together effectively to facilitate transition, along with how federal and state government programs can

¹ For the purposes of this case study, Tonawanda refers to the town of 72,000 in western New York (US Census Bureau 2021a), not to be confused with the city of Tonawanda, a smaller municipality directly to the north of it, nor with North Tonawanda, a city farther north in Niagara County. Tonawanda includes the village of Kenmore, a semiautonomous suburb of 15,000 people (US Census Bureau 2019) that has its own mayor and board of trustees but is still subject to Tonawanda's taxing jurisdiction. Kenmore and Tonawanda share a public school district called the Kenmore-Tonawanda Union Free School District, which includes nine schools that collectively serve almost 7,000 students (KTUFSD 2020).

provide important financial support. Given the diversified economy of the broader Buffalo metro area, however, the Tonawanda experience may have limited applicability to communities embedded in larger regions undergoing energy transition, such as Central Appalachia, where coal mining has precipitously declined in recent years. In these areas, communities may face larger economic and fiscal challenges, have more complex stakeholder dynamics, and enjoy less support from state government. That said, insights from the Tonawanda case can be helpful for communities undergoing transition of any kind, taken in context. These insights include the following:

- Start planning early. A proactive approach to transition is essential for securing
 funding, coordinating stakeholders, and planning redevelopment. Communities
 and organizations facing a transition should begin planning as soon as it becomes
 clear that a facility will shut down, and energy companies should endeavor to
 provide early warning.
- Formalize the transition. Without dedicated personnel and funding, transition
 planning can lack focus and lose momentum. To the extent possible, communities
 should seek to formalize the transition process, such as by establishing a
 committee or task force charged with creating an open forum for community
 deliberation, developing policy solutions, and potentially conducting advocacy
 and implementation.
- Engage a diversity of stakeholders. Within the sort of civic forum just described, it is important to engage diverse stakeholders early to ensure representation of the variety of community interests that will ultimately have a say in transition and development decisions.
- Identify a common objective. Clearly defining a common objective at the outset can provide the platform needed for effective cooperation among stakeholder groups.
- Expect and plan for indirect consequences. Proactive engagement with a
 diverse array of stakeholders can also help planners anticipate potential indirect
 consequences of a facility's closure. For example, the Huntley closure jeopardized
 the availability of water for industrial uses in Erie County, which historically
 depended on pumping facilities at the Huntley plant. Energy transition programs
 should have sufficient flexibility to address local variations.
- Procure transition funding from state and federal agencies. The retirement of
 a coal facility can eliminate local government tax revenue, making it difficult to
 locally fund transition efforts. Dedicated state and federal transition funding can
 help local governments mitigate the immediate fiscal impact of the shutdown and
 provide them with a window in which to plan for an economic transition.

2. Background

2.1. Tonawanda and Erie County

Tonawanda sits on the eastern (American) bank of the Niagara River, 11 miles southeast of Niagara Falls and 7 miles north of the city of Buffalo. While Tonawanda is in some ways a suburb of Buffalo, it is also an industry hub in its own right, hosting 3,690 manufacturing jobs, or 8 percent of the Buffalo metro region total (US Census Bureau 2021a, 2021b; Headwaters Economics 2020). Tonawanda's western portion, along the Niagara River, is home to large manufacturers, including General Motors, Indeck Yerkes, PeroxyChem, 3M, and Linde (ERIS 2018).

In 2018, the median household income in Tonawanda was \$61,571. This is lower than the median income for New York State (\$68,486) and for the United States (\$62,843). Today the largest sectors of employment in Tonawanda are healthcare (15 percent of total employment), education (15 percent), and retail (13 percent) (US Census Bureau 2021a). A significant portion of this workforce is unionized. A 2019 study found that 20 percent of all workers in the Buffalo-Niagara Region are union members, placing it in the 91st percentile of union membership across the country (Weaver 2019). The labor union United Steel Workers (USW) Local 135 represents around 1,600 workers in Tonawanda's industrial sector (Watson 2018b).

Tonawanda is part of Erie County, which covers 1,227 square miles at the western edge of New York, on the shore of Lake Erie. As of 2019, Erie County was home to 919,000 people. Of this population, 255,000 reside in Buffalo, the county seat and New York's second-largest city (US Census Bureau 2021a).

For much of the nineteenth and twentieth centuries, Erie County was an economic powerhouse, serving as a major trade and manufacturing hub for the region. Its prosperity dates back to 1825, with the completion of the Erie Canal. In the years that followed, the population of the region exploded as it became a strategic waypoint connecting the Great Lakes region to East Coast markets. As the century wore on, the Niagara River corridor developed a thriving mill industry (Glaeser 2007).

Around the turn of the century, Erie County evolved into a manufacturing hub. The construction of a hydroelectric generating plant at Niagara Falls in 1893 made Erie County one of the only places in the country with electricity at the time (Glaeser 2007). This development, in addition to the large amounts of coal being transported via the Erie Canal, made the region an ideal location for heavy manufacturing. Between 1890 and 1930, steel, aluminum, and automobile manufacturing spawned tens of thousands of jobs in the region, and the county's population grew from 323,000 to 762,000. This prosperity persisted for several decades, with the county's population peaking at 1.1 million in 1970 (ESD 2000).

Over the second half of the twentieth century, Erie County traced a path of economic hardship reflective of many other Rust Belt communities. Starting in the 1970s, as transport by train and truck became more cost-effective, access to waterways like the Erie Canal was less of a competitive advantage. Dramatic improvements in electricity transmission diminished the benefit of proximity to hydropower, while a host of globalization developments (e.g., lower barriers to trade, relatively cheap foreign labor and transportation costs, and improved telecommunications) incentivized many manufacturers to relocate overseas (Klein 2016).

Erie County's manufacturing sector has now seen several decades of decline, employing 45,000 people in 2019, down from 130,000 in 1970. In 1970, manufacturing accounted for 27 percent of Erie County's jobs; in 2019, it accounted for only 8 percent. Over this same period, total annual labor earnings from manufacturing in Erie County fell from \$8.8 billion to \$3.9 billion (in 2019\$; Headwaters Economics 2020).

The manufacturing decline translated to broader socioeconomic challenges. The county's population dwindled along with the economy—after peaking at 1.1 million in 1970, it decreased steadily to 919,000 in 2019. This reduction was driven chiefly by outmigration (Headwaters Economics 2020). Over the same period, personal income in Erie County grew at less than half the rate of that in the United States as a whole, and employment at less than a third.

These trends were especially severe in Tonawanda, which saw its population decline by 33 percent between 1970 and 2019, twice the rate of the larger Buffalo-Niagara region (US Census Bureau 2021a). Eighty percent of those who continue to work in Tonawanda today live elsewhere, likely as a result of Tonawanda's high housing costs and low residential turnover (Tonawanda Tomorrow 2017).

After decades of decline, manufacturing employment in Erie County has stayed roughly constant since 2010. The sector remains an attractive employer, paying an average of \$68,283 per year, 31 percent above average for Erie County (Headwaters Economics 2020). Meanwhile, other industries have expanded as manufacturing declined. Employment in the service sector has almost doubled since 1970, with particularly large gains appearing in the financial services sector (Robinson 2020a). The Covid-19 pandemic damaged the region's economy but appears to have largely spared the manufacturing industry, in which employment rebounded quickly after a dip in March and April 2020 (Robinson 2020b; WKBW 2020). The full scope of the pandemic's impact on the region, however, is not yet clear.

3. Significance of Huntley Generating Station for Tonawanda

The C. R. Huntley Generating Station (hereafter Huntley) had been a feature of Tonawanda's riverfront and an important component of the local industrial economy for over a century. The plant began operating in 1916 with the completion of a single 20 megawatt (MW) coal-fired unit. By 1931, six additional units had been constructed, bringing the total capacity to 305 MW. Between 1942 and 1958, Huntley added six more—larger—units, reaching its maximum capacity of 1,150 MW in 1958, before retiring its older, smaller units.² Huntley's owner, the Niagara Mohawk Power Company, maintained the plant's 780 MW of generating capacity from 1963 through 1998, when the reorganization of the New York power sector forced the company to auction off all its generating assets (NYSDEC 2018). In 1999, Niagara Mohawk sold Huntley to New Jersey-based NRG Energy (Kunkel et al. 2014; DiSavino and O'Grady 2014).

From 1999 to 2016, NRG operated Huntley via a special purpose vehicle named Huntley Power, LLC. Between 2000 and 2005, Huntley generated, on average, 3.2 terawatt-hours (TWh) of electricity per year (FERC 2000–2016). During this same time, the plant reported yearly revenue between \$115 million and \$190 million (Kunkel et al. 2014; SEC 2002).

3.1. Role in Tonawanda's Economy

At its peak utilization, Huntley was both a sizable and attractive employer. Workers at the plant—who numbered more than 200 in the early 2000s—reportedly received salaries and benefits that exceeded the regional average, with many retaining membership in the local electrical workers union (see Section 4.1).

Throughout its operation, the Huntley Generating Station pumped untreated (raw) water from the Niagara River to use as coolant in its generating units. It also supplied a portion of the water it pumped to local industrial facilities. As far back as 1920, the owners of the property maintained a system of easements, licenses, and leaseholds on the pumps, pump houses, and water lines; these agreements allowed the nearby businesses to obtain raw water from the site at an affordable rate (Holmes 2019; Fischer 2018a). By the time the plant shut down, Huntley's pump houses were supplying 19 million gallons of raw water per day to local manufacturers, including PeroxyChem, Sumitomo, and 3M (Watson 2018b). These companies did not pay for the water on a per-use basis, but rather paid a sum specified in the agreement in exchange for year-round access to Huntley's intake bays. This system served as a boon for these companies, as drawing potable water from the municipal water treatment plant would have cost local businesses an additional \$24 million per year (Holmes 2019).

² Huntley was the largest coal power plant in the world during World War II.

Lastly, the Huntley plant occupied a valuable plot of land along the Niagara River. The property consisted of 219 acres roughly three miles from the Tonawanda town center, including an 84-acre parcel of land, directly abutting the Niagara River, on which the generating plant and several outlying structures stood; an 18-acre, undeveloped plot of land across the street from the main facilities; and a 117-acre plot of land about a mile away, which hosted a fly ash landfill (Holmes 2019). According to accounts from local leaders, the assessed value of \$194.4 million likely understated the importance and potential of the property. Town Supervisor Joseph Emminger, for example, noted that in a town with almost no vacant space, a riverfront property that large with such a "beautiful view" was of immense value to the town and its community members.

3.2. Fiscal Significance

Local property tax revenue from Huntley went to three local governments: the Kenmore-Tonawanda School District, the Town of Tonawanda, and Erie County. Based on its assessed property value of \$194.4 million (which was equivalent to 0.6 percent of Erie County's total property tax base and 11.2 percent of Tonawanda's), Huntley's total annual property tax liability for the early 2000s would have been roughly \$23.8 million (Habuda 2011a; Poloncarz 2010; NYS ORPTS 2010; Erie County 2009, 2010). NRG deemed this value prohibitively expensive and negotiated a series of tax exemption agreements. These agreements, signed by NRG and the Erie County Industrial Development Agency (ECIDA), enabled the company to provide payments in lieu of taxes (PILOT) to its three taxing jurisdictions. Annual payments would follow a schedule specified in the agreement. The allocation of these PILOT revenues among the town, school district, and county would reflect each jurisdiction's relative tax rate in the year the agreement was signed. One such agreement, signed in 2001, set out a schedule whereby Huntley's property tax burden ranged from \$13.3 million in 2002 (the first year of the agreement's enforcement) to \$11 million in 2008 (its final year). Of these PILOT funds, 65 percent went to the Kenmore-Tonawanda School District, 21 percent to the Town of Tonawanda, and 14 percent to Erie County for the duration of the agreement (ECIDA 2001).

This PILOT agreement expired in 2008, leaving Huntley without a tax exemption. On the grounds that it had retired some of its capacity, NRG threatened to sue over its \$194.4 million assessment, a suit that would, if successful, force the school district to repay \$18 million of what NRG deemed unfairly high PILOT payments (Habuda 2011b). The company dropped the lawsuit after the parties agreed to a new 20-year PILOT schedule and an assessment of \$72.9 million for the property (Habuda 2008). A further dispute over the timing of the agreement delayed its implementation until 2013, so from 2009 through 2012, NRG paid \$14 million to \$15 million in property taxes annually (Poloncarz 2009, 2010; Shenk 2011; Mychajliw 2012; Habuda 2012; NYS ORPTS 2010; State of New York 2009, 2011, 2012; KTUFSD 2009, 2010, 2011, 2012).

The new agreement tied Huntley's property tax burden to the plant's operable capacity. In 2013, for example, NRG would pay \$16,082 for every MW it had in operation, with the payments per MW rising every subsequent year. Under this new agreement, Huntley paid out between \$6.0 million and \$8.1 million annually until it shut down, with the school district, town, and county receiving 52 percent, 33 percent, and 15 percent, respectively (ECIDA 2009).

Even with declining profitability, Huntley was a major source of tax revenue in the region. In 2010, Huntley was Tonawanda's and the school district's largest taxpayer, providing 5.1 percent of the town's operating budget and 4.8 percent of the school district's (KTUFSD 2009; Town of Tonawanda 2016). It was also Erie County's third-largest taxpayer, providing 0.12 percent of its total revenue for the year (Poloncarz 2010).

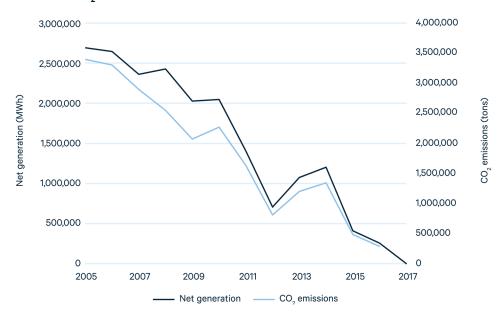
3.3. Environmental Impacts

Decades of heavy manufacturing in Erie County have resulted in contamination to the region's soil, air, and water. The EPA reports elevated levels of polychlorinated biphenyls (PCBs), dioxin, dibenzofuran, polychlorinated aromatic hydrocarbons (PAHs), and pesticides in the soil and groundwater. Certain communities near coking or coal combustion facilities experience unhealthy ambient levels of sulfur dioxide, nitrous oxides, and particulates (EPA 2020a). The New York Department of Environmental Conservation has identified 96 sites in need of remediation within Erie County and 10 in Tonawanda alone (NYSDEC 2020b). Environmental health remains a pressing concern for local leaders despite ongoing EPA remediation activities (EPA 2020a).

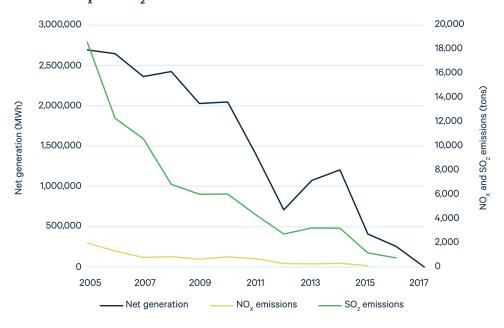
In 2000, Huntley emitted 52,000 tons of atmospheric sulfur dioxide, 11,0000 tons of nitrous oxide, and 4.2 million tons of carbon dioxide (EPA 2020b). From 2002 to 2013, Huntley was Erie County's biggest source of air pollution for all but one of these years, even after switching from Appalachian to western coal in the 1990s to lower sulfur dioxide emissions. To further reduce emissions, NRG completed a \$35 million sulfur reduction project in 2005 and spent \$115 million on "back-end environmental controls" in 2009. The plant's declining utilization also played a role in reducing emissions (Pignataro 2014). In 2015, the plant emitted only 1,000 tons of sulfur dioxide, 251 tons of nitrous oxide, and 482,000 tons of carbon dioxide (EPA 2020b). Between 2005 and 2017, Huntley's carbon dioxide, nitrous oxide, and sulfur dioxide emissions declined in tandem with net generation (Figure 1, Panels A and B).

Figure 1. Huntley's CO_2 , NO_x , and SO_2 emissions, 2005–17

Panel A. CO₂ emissions



Panel B. NO_x and SO_2 emissions



Data sources: EPA (2020d); NYISO (2019a).

Huntley is also responsible for a significant amount of soil pollution. In 2014 alone, the plant released 116,000 pounds of ammonia, 3,400 pounds of barium compounds, 22,000 pounds of acid aerosols, 38,000 pounds of hydrogen fluoride, 93 pounds of lead compounds, and 7.2 pounds of mercury compounds (EPA 2020d).

3.4. Retirement

By 2008, in part because of increased competition from natural gas and renewables, Huntley became increasingly uneconomical, and net generation gradually declined through 2017, when NRG permanently retired the plant (Figure 2).³ State-level regulations on power plant carbon emissions (the Regional Greenhouse Gas Initiative, or RGGI) and on coal waste management also have made it more expensive to operate a coal plant. As a result, all of New York's coal plants have been retired or mothballed since 2000 (GEM 2021).

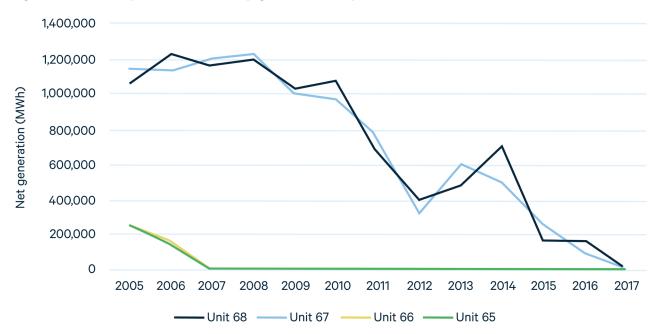


Figure 2. Huntley's net electricity generation by unit, 2005–17

Data source: FERC (2000-2016).

In 2006, NRG retired two of Huntley's coal-fired units (63 and 64) because of aging and underutilization, reducing the plant's generating capacity to 636 MW. A year later, it retired two more units (65 and 66), reducing capacity further, to 436 MW. From 2007 to 2016, Huntley used only two units (67 and 68), which operated less and less as the years went by (Kunkel et al. 2014). Between 2005 and 2015, Huntley's net generation dropped 85 percent, leaving it operating at 11 percent of its capacity for its last full year (NYISO 2019a).

As a consequence of lower utilization, Huntley's revenues fell steadily from 2005 through 2016 (Figure 3). In its final full year of operation, the plant reported only \$19.4 million in revenues, a 90 percent drop from the \$188.8 million it reported in 2005 (FERC 2000–16).

³ Between 2000 and 2016, the state added 8,384 MW of new natural gas capacity and 1,921 MW of new wind and solar capacity. During this time, overall New York electricity demand remained stagnant, increasing only 0.25 percent per year over the same period (EIA 2019a, 2019b).

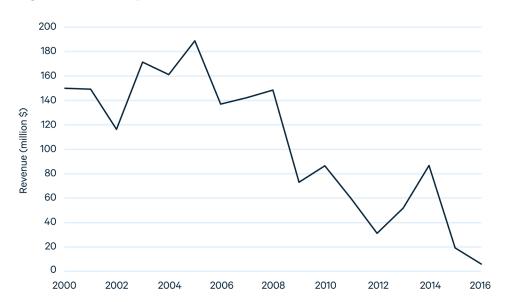


Figure 3. Huntley's annual revenues

Data sources: Kunkel et al. (2014); SEC (2002).

During Huntley's decline, NRG made several efforts to keep the plant open through alternative means. In 2006, the office of New York governor Pataki announced a billion-dollar incentive program to build a "clean coal" facility somewhere in the state. NRG submitted a \$1.5 billion plan for a 680 MW coal generator with integrated gasification combined-cycle technology and carbon capture capability (*Buffalo News* 2006). The plan won conditional approval from the New York Power Authority (NYPA), which pledged to fund the project, provided NRG could bring the cost down to \$1 billion. A year and a half later, though, the plan's cost had ballooned to \$2.3 billion, and NYPA formally withdrew support (*Buffalo News* 2008).

Then, on October 14, 2015, NRG applied to the Federal Energy Regulatory Commission (FERC) for a Reliability Support Services Agreement (RSSA), a mechanism through which state regulators use money from ratepayers to guarantee economic returns to a plant that is deemed essential for grid reliability (Waldman 2015).⁴ This agreement, if approved by the New York Independent System Operator (NYISO), would have kept Huntley running until 2020 and collectively cost New York ratepayers \$260 million (Richardson 2015).

⁴ There was precedent in New York for such agreements. FERC approved a 1-year RSSA for the Cayuga Coal Plant in 2012, a 3.5-year RSSA for the Ginna Nuclear Power Plant in 2015, and a 2.5-year RSSA for NRG's Dunkirk Coal Plant in 2013 (Cayuga Operating Company 2012; Rochester Gas and Electric 2015; Cassell 2015). In fact, on the same day that NRG announced its plan to close Huntley, it announced plans to mothball the Dunkirk plant following the expiration of its RSSA at the end of the year. The timing prompted some to speculate that NRG was trying to increase pressure on NYISO to support a new RSSA by taking 654 MW offline at once (Waldman 2015)

On August 28, 2015, the New York Public Service Commission (NYPSC) had requested that both the NYISO and National Grid (the grid operator in that part of New York) conduct reliability studies to determine what impact closing Huntley and another coal plant called Dunkirk would have on the grid (Addepalli 2015). On October 30, both organizations concluded their studies, finding that shutting down both plants would not materially harm the grid's reliability (Akter 2018). Accordingly, on December 28, the NYPSC notified FERC and filed a motion to dismiss the RSSA application (Drexler 2015). FERC denied NRG's application, setting the power plant on track for permanent retirement. No further actions were taken to keep Huntley open, and on March 1, 2016, the plant permanently stopped generating electricity.

4. Transition Issues for Tonawanda

Huntley's closure had ramifications for Tonawanda's tax revenue and associated public services, as well as the broader economy and workforce. This section examines such impacts associated with Huntley's decline between 2000 and 2016.

4.1. Impacts on the Local Workforce

Before NRG began retiring generating units, Huntley employed roughly 250 workers on-site. These workers were represented by the IBEW Local 97 (IBEW 2020). They typically earned \$40–\$45 per hour, or 135–150 percent of the Erie County average earnings per job at the time (Lipsitz, interview with authors, 2020; Headwaters Economics 2020). Additionally, the workers enjoyed relatively generous benefits.

With profitability and utilization declining, NRG gradually reduced its workforce. By the time Huntley closed permanently in 2016, its workforce had already declined to 79 (Watson 2019a). As the plant approached closure, union leaders sought a way to help these 79 workers transition to a stable situation (either new employment or retirement) after leaving Huntley.

4.2. Impacts on the Kenmore-Tonawanda Union Free School District

The Kenmore-Tonawanda Union Free School District (KTUFSD) received the majority of Huntley's PILOT revenue, which accounted for 5–9 percent of the district's revenue in the early 2000s (KTUFSD 2001–2010; ECIDA 2001, 2009). However, consistent increases in school taxes and a surge in federal and state support in 2015 effectively compensated for the loss of PILOT revenue.

A more pressing issue for the district during this period was student enrollment, which had been declining ever since the economic boom of the 1960s. Between 2000 and 2016, total enrollment in the district dropped 25 percent (NYSED 2005, 2016). As a result, the district reported staff reductions for three consecutive years, from 2006 to 2008, and even closed one school, Thomas Jefferson Elementary, in 2013 (KTUFSD 2022).

So while Huntley's decline and eventual closure presented a challenge, it was only one of multiple challenges facing the district at that time. The loss of PILOT revenue, while significant, resulted in a plateau rather than a decline in the district's overall revenue (Figure 4).

\$160
\$140
\$120
\$100
\$80
\$80
\$80
\$40
\$20
\$0

Total revenues — State and federal aid — Revenue from real property tax
— Appropriated general funds — Revenue from sales tax — PILOT revenues
— Other revenues

Figure 4. Kenmore-Tonawanda Union Free School District annual revenues

Data source: KTUFSD (2000-2020)

4.3. Impacts on the Town of Tonawanda

The Town of Tonawanda also faced an extended decline in revenue from Huntley. Under the agreement that went into force in 2002, PILOT revenue from the power plant accounted for roughly 3 percent of the town's operating budget (ECIDA 2001). In August 2016, the threat of potential litigation forced the town to reduce Huntley's property value to \$13 million, down from \$194.4 million in 2008 (Popiolkowski 2016; Habuda 2008). Under this new valuation, Huntley's annual contribution to Tonawanda's coffers fell to \$172,000 (roughly 0.2 percent of the town's budget), down from \$2.6 million in 2002, and it remained at roughly the same level as of 2020 (Erie County 2020b, 2020c).

The municipal government largely managed to withstand the financial pressure wrought by Huntley's decline. The town's annual budget has remained relatively constant, at around \$100 million, and Town Supervisor Joseph Emminger noted that the town did not lay off anyone as a result of decreased PILOT revenue, nor did it have to curtail any municipal services (Town of Tonawanda 2016).

4.4. Impacts on Erie County

In 2002, Huntley was Erie County's third-largest taxpayer, contributing \$1.8 million in PILOTs, or 0.14 percent of the county's total revenue (ECIDA 2001; Poloncarz 2002). By 2015, that amount had decreased to \$0.8 million (Figure 5). As Huntley accounted for a relatively small portion of county revenue, there have been no reports of a loss of county services or personnel due to Huntley's decline. Erie County's revenue stream increased by 30 percent between 2002 and 2019 (Poloncarz 2019).

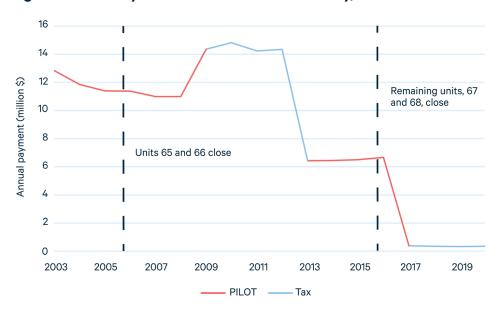


Figure 5. Huntley's total tax and PILOT liability, 2003-19

Data sources: ECIDA (2001, 2009; Erie County (2020b).

4.5. Impacts on Land Use

With almost a mile of riverfront and an unobstructed view southward toward Grand Island and Peace Bridge, Ontario, the Huntley property has significant economic and recreational potential. Residents feared that leaving it undeveloped and in a state of decay would forgo both a once-in-a-generation development opportunity and necessary property tax revenue (Emminger, interview with authors, 2020).

But the property also contained potentially dangerous contamination, thanks to a century of coal combustion and storage. An environmental assessment in 2018 found that arsenic contamination in the soil exceeded the EPA allowed limit by up to 3,000 percent (EPA 2001, 2020d). Additionally, investigators found petroleum contamination where the coal pile had previously stood. Such pollution presented a danger to local residents and required remediation before any development could occur (see Box 1).

Box 1. The Case of Bethlehem Steel

Residents of Tonawanda saw a cautionary tale in the case of the Bethlehem Steel plant in nearby Lackawanna, New York. The plant had served for 60 years as an economic powerhouse for the region, employing over 22,000 workers at its peak in the late 1960s. But in 1983, after years of declining profitability, the owners ceased steel manufacturing at the plant, laying off 7,000 workers at once. The plant continued to operate at diminished capacity for 18 more years—primarily focused on coke production—before being shut down for good in 2001 when Bethlehem Steel declared bankruptcy (Falsone 2015).

The shutdown of the plant left vacant 1,100 acres of land and several buildings. Since its decline, a series of redevelopment plans have been proposed, though none managed to gain traction. Parcels of the land have been sold off to support a wind power plant and a bike path, but the majority of the property remains abandoned, contaminated, and rusting. A fire at the site in 2016 further contributed to a sense of neglect (Tan and Epstein 2017).

Today the remains of Bethlehem Steel are visible to drivers on Route 5 and represent to many a monument to the region's economic decline. As Tonawanda prepared for the shutdown of Huntley, residents were eager to avoid the path of Bethlehem Steel. Town Supervisor Joseph Emminger declared, "We are determined not to allow Huntley to become like Bethlehem Steel in Lackawanna, sitting vacant and decaying for decades—to become an eyesore on the Tonawanda waterfront" (Fischer 2017b). To both substantively and symbolically revitalize their town, Tonawanda residents were determined to sell and redevelop the property as quickly as possible.

4.6. Impacts on Industrial Water Supply

Because Huntley was a major source of raw water supply for industries in the area, town officials and local manufacturers were concerned that this supply might be interrupted by the plant's closure. Town officials claimed that NRG "wanted out of the water business," though NRG maintained that it was willing to negotiate contract extensions (Fischer 2018a). Switching their water intake to the municipal water treatment plant would have cost local businesses \$24 million annually. According to one source, such an occurrence risked eliminating up to 3,000 jobs and further reducing Tonawanda's tax base (Fischer 2018b).

The town proposed a plan in January 2018 to build a new pump station at its municipal water treatment plant, estimating that the pump station would cost \$27.2 million and take three years to construct (Fischer 2018b). Several firms indicated a willingness to help finance the facility but balked at the price tag (Watson 2018b). A major campaign ensued to provide grant funding to the project and persuade NRG not to interrupt the water supply. Under pressure from local groups, State Senator Chris Jacobs (R-60) and State Assemblyman Robin Schimminger (D-140) began to advocate for state grant funding to support the pump station. In April 2018, Senator Chuck Schumer (D-NY) traveled to Tonawanda to publicly urge NRG not to cut off the water supply (Buffalo News 2018a; see Section 7.3 for updates on this process).

5. The Huntley Alliance and State Support

Even before NRG announced plans to close Huntley, local leaders feared what would happen to Tonawanda if the plant shut down, including the transition issues discussed in the previous section. By fall 2013, Peter Stuhlmiller, the president of the Kenmore-Tonawanda Teachers Association, was worried that such an event was imminent. He contacted Richard Lipsitz, the president of the Western New York Area Labor Federation (WNYALF), AFL-CIO, to discuss what might be done to protect the school district if Huntley shut down. The two men also engaged Rebecca Newberry, the executive director of the Clean Air Coalition of Western New York (CACWNY), which had long been concerned about the environmental and health impacts of the plant. The group, alarmed that no plan existed to deal with the impacts of Huntley's eventual shutdown, decided to take action to address the challenge (McGowan 2017a). In Lipsitz's telling, their primary goal was to mitigate the immediate effects of Huntley shutting down. A secondary goal, if the first succeeded, would be to set in motion a long-term planning process to support the town in a post-Huntley future.

5.1. Community Organizing Efforts

For two and a half years, Stuhlmiller, Lipsitz, and Newberry worked with Tonawanda community members to plan for Huntley's shutdown. At its core, the coalition, which came to be known as the Huntley Alliance, consisted of an informal group of four to eight people representing CACWNY, the Kenmore-Tonawanda Teachers Association, WNYALF, and the Town of Tonawanda. Through a series of in-person meetings and phone calls, this group organized at least 10 public listening sessions in which between 30 and 100 community members met to discuss how to care for the community in the event of a Huntley closure. They also organized door-to-door surveys to gauge public opinion and voter registration drives to pressure public officials for support (Lipsitz, interview with authors, 2020).

The first meeting of the coalition went smoothly. The group was joined by representatives of the Sierra Club and IBEW. All parties agreed on the need to address Huntley's eventual shutdown. But problems arose quickly thereafter. At the next meeting, members of the Sierra Club organized a protest. A group of people demonstrated outside the meeting—some wearing union T-shirts—to call for the immediate shutdown of the Huntley plant to prevent further pollution (McGowan 2017a). The demonstration enraged IBEW members, who maintained a close relationship with NRG and for whom Huntley was their source of employment. Further, it threatened to permanently alter the Huntley Alliance's reputation; IBEW members and elected officials alike accused the demonstrators of trying to sabotage the plant. Following the incident, the coalition collapsed and remained inactive for over six months (Lipsitz and Newberry 2016).

But Huntley's shutdown still loomed, so the coalition sought to regroup. In early 2014, the parties reconvened to once again discuss how to cope with the economic impact of losing Huntley as a source of tax revenue and employment. This time, the Sierra Club did not protest and took a somewhat sidelined role. IBEW, still wary of the coalition's intentions, did not return (McGowan 2017b). In rebuilding the coalition, the leadership took an agnostic approach to Huntley shutting down; they would not seek to expedite the plant's decline, but rather would just plan for its eventual closure. The late January 2014 publication of a report by the Institute for Energy Economics and Financial Analysis predicting Huntley's imminent shutdown—strictly on a profitability basis—bolstered this stance. With the understanding that the plant was headed toward shutdown anyway, coalition members could focus exclusively on planning for the event (Lipsitz and Newberry 2016).

5.2. Lobbying Efforts

For the first two years, the coalition maintained a distance from state elected officials. Throughout their community organizing, the stakeholders remained focused on local residents and organizations to best present a united front (Lipsitz, interview with authors, 2020). Finally, in spring 2015, coalition members decided to lobby for support from the state government. In Emminger's telling, the group organized three or four trips to Albany, where a group of 10–12 people pressed elected officials to provide funding to help Tonawanda manage the fiscal impact of Huntley's closure. During their visits, the group met with Assemblyman Robin Schimminger, State Senator Marc Panepinto, and members of the office of Governor Andrew Cuomo.

Emminger and Lipsitz both recalled a unanimously receptive audience for their requests. Within nine months of when the coalition first approached lawmakers, Governor Cuomo signed into law a fund that would support Tonawanda and the school district for five years following Huntley's retirement (see Section 5.3).

The Huntley Alliance was widely hailed as an example of community organizing done right, both by news outlets and just transition experts (Skibell 2020; McGowan 2017a; Buffalo News 2016; Reiter 2017; Cha 2019; NADO 2017; Cha et al. 2019). The coalition had successfully engaged a diversity of stakeholders and accomplished its goal

of securing mitigation funding to smooth the fiscal impact of Huntley closing. The formation of a functional coalition of diverse community stakeholders, such as the Huntley Alliance, is arguably one of the key just transition best practices to be gleaned from the Huntley experience.

Lipsitz attributed the success of the Huntley Alliance to unity within the coalition. Such an achievement was far from ensured, given the delicate balance between environmental and labor organizations. Stakeholders had to make an effort to avoid stereotyping; labor organizations had to demonstrate a commitment to the environment, while environmental groups had to show they were not anti-industry. Lipsitz also lauded the strategy of waiting to involve state elected officials—by focusing first on community organizing, the coalition was able to present a unified front and make succinct lobbying requests that were difficult for elected officials to refuse. By fostering unity at home, the coalition laid the groundwork for government support.

5.3. The Electric Generation Facility Cessation Mitigation Fund

Fiscal support for Tonawanda came in the form of an omnibus spending bill, S6012, that passed the New York State Senate and was signed into law on June 26, 2015. Included in the bill (Part C, Subpart H) was a \$19 million outlay for the Urban Development Corporation (UDC, the corporate entity of Empire State Development) to aid communities facing tax shortfalls as a result of fossil fuel power plants closing. The UDC was empowered to disburse these funds to any "municipal corporation or school district" that had seen a 20 percent or greater reduction in tax or PILOT collections from a fossil fuel power plant within its taxing jurisdiction. Communities meeting these criteria could apply to the UDC and, if approved, receive a disbursement to support their revenue base. The payment was up to 80 percent of the lost revenue in the first year after the plant's shutdown and would decrease every subsequent year. Applicants could reapply every year for up to five years. According to the bill, the fund would be active from April 1, 2016, until July 1, 2025, or until the \$19 million was fully expended, whichever occurred first.⁵

The 2016–17 New York State budget expanded the fund and relaxed the eligibility requirements. Part BB, Section 1 of Appropriations Bill S6408-C/A9008-C (2016) set aside a total of \$30 million for the fund, now called the Electric Generation Facility Cessation Mitigation Fund. Eligible entities included any "county, city, town, school district or special district" where any (rather than just fossil fuel) electric generation facility had permanently shut down on or after June 25, 2015 (State of New York 2016). Funding for this program was drawn from RGGI allowance proceeds (S6408-C 2016).

⁵ State of New York, 2015, Emergency Housing Rent Control Law, https://www.nysenate.gov/legislation/bills/2015/S6012.

Following a coordinated effort between Assemblyman Schimminger and State Senator Jacobs, the 2017–18 New York State budget further expanded the Electric Generation Facility Cessation Mitigation Program (EGFCMP). In Appropriations Bill S2008-C/A3008-C, the state legislature authorized an additional \$15 million in proceeds from RGGI for the fund, bringing the total to \$45 million. The appropriations bill also extended the period over which entities could draw from the fund. According to the new funding plan, municipalities could receive up to 80 percent of lost revenue during the first year. Disbursements would then decrease by 10 percent of the lost revenue each year, and recipients could reapply for up to seven years (\$2008-C 2017).

The 2018–19 New York State budget expanded the EGFCMP by another \$24 million, bringing the total pot to \$69 million. The legislature made no changes to the source of funding or the nature of the support provided (DiNapoli 2018).

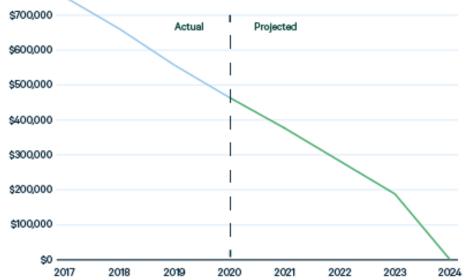
5.4. The EGFCMP's Impact on Tonawanda

The Town of Tonawanda received \$607,000 from the EGFCMP in 2017, \$533,000 in 2018, \$449,000 in 2019, \$369,000 in 2020, \$295,000 in 2021, and \$227,000 in 2022—in total, \$2.5 million (Town of Tonawanda 2016, 2017a, 2018, 2019, 2020, 2021). The town will receive its final disbursement, \$163,000, in 2023 (Figure 6).

Figure 6. Town of Tonawanda's received and expected support from the EGFCMP

\$700,000

Actual Projected



Data source: Town of Tonawanda's received and expected support from the EGFCMP.

Town revenues fell only 0.5 percent in the four years since Huntley closed, and the annual operating budget actually grew 3.3 percent (Town of Tonawanda 2016, 2019), in part thanks to funding from the program. Property taxes in Tonawanda, rather than increasing to compensate for the loss of PILOT revenue, fell by 3.8 percent between 2017 and 2020 (Erie County 2016, 2020a). Because of data limitations, we do not have similar estimates for the fund's impact on Erie County and the school district.

Members of the Huntley Alliance expressed satisfaction with the legislative response to Huntley's closure. Emminger called the intervention "enormously successful," noting that it allowed Tonawanda to maintain its revenue base without increasing taxes on anyone. While admitting that the town may have to slow down hiring in the future as funding from the program decreases, he said that no services have been curtailed and no town employees were laid off as a result of Huntley closing. Labor leaders were similarly pleased with the outcome; many had feared that the town would have to increase property taxes to compensate for Huntley's closure, potentially causing some employers to relocate their facilities elsewhere (Lipsitz, interview with authors, 2020). Dave Wasiura, assistant director of the local chapter of USW, likewise said that many jobs had been saved.

6. Tonawanda Tomorrow

The EGFCMP provided Tonawanda, Erie County, and the Kenmore-Tonawanda School District with a temporary reprieve from the fiscal impact of Huntley's closing. But with the funding set to run out after 2023 and no clear plan for repurposing the site and replacing the lost tax revenue, local leaders recognized the need for a sustainable long-term strategy (Emminger, interview with authors, 2020).

Building on the momentum of the Huntley Alliance, Newberry and Lipsitz began laying the groundwork for a community-driven, and more formalized, planning process that would chart the town's post-Huntley economic development. They petitioned the support of US Senator Chuck Schumer, who publicly urged the US Economic Development Administration (EDA, an agency in the Department of Commerce) to provide the funding necessary to pursue this project (Lipsitz, interview with authors, 2020; Schumer 2015).

Locally, Lipsitz and Newberry convened a coalition of local organizations to contribute to the planning process. The process was formally hosted by the Town of Tonawanda Department of Planning and Development, overseen by its director, Jim Hartz. Major decisions and guiding principles fell to an Advisory Committee consisting of local stakeholders, including the Buffalo Center for Arts and Technology, CACWNY, Erie County, and WNYALF. The committee also solicited the guidance of the University at Buffalo Regional Institute (UBRI) and the Delta Institute, a Chicago-based environmental consulting firm (Tonawanda Tomorrow 2017).

⁶ It should be noted, however, that because the property value equalization rate in Tonawanda fell to 35 percent, many residents reported higher tax bills (Tan 2020).

On July 22, 2016, the EDA awarded \$160,000 to UBRI via the Partnerships for Opportunity and Workforce and Economic Revitalization (POWER) initiative—an Obama administration multiagency program focused on economic development in coal-impacted communities—to support this planning effort (EDA 2016). The coalition called its project Tonawanda Tomorrow and kicked off a 10-month program of research and community engagement to produce a comprehensive plan for the town's post-Huntley future.

6.1. Objectives

Tonawanda Tomorrow described itself as follows: "Tonawanda Tomorrow is a community partnership with the Town of Tonawanda, community groups, local businesses, organized labor and residents. The effort is focused on creating goodpaying jobs for the 21st Century, preparing our residents and workers for those jobs, and reinvesting in our community to preserve what makes Tonawanda such a great place to do business and raise a family" (Tonawanda Tomorrow 2017).

The group sought to answer the following questions:

- How does the town maintain high-quality public service and address its aging mid-twentieth century infrastructure as its tax base has declined?
- · How can industry thrive in Tonawanda while not raising public health concerns?
- What can be done with vacant land from Tonawanda's industrial past to pave the way for the economy of tomorrow?
- How does Tonawanda generate an economic vision for its future that is resilient, supports good jobs, and promotes equitable development?

In answering these questions, Tonawanda Tomorrow separated its work into three categories: *economy, workforce*, and *placemaking*. Its members envisioned a plan that, if enacted, would lead Tonawanda to a future in which the town is fiscally healthy, the workers and community members are protected, and the land is sustainably used to its full potential (Tonawanda Tomorrow 2017).

In the words of Joseph Emminger, Tonawanda Tomorrow was a "wish list" for Tonawanda's future. Though spurred by the closure of Huntley, Tonawanda Tomorrow had evolved into a comprehensive plan for the town's development. The loss of Huntley occurred within a decades-long economic slide for the town, and members of the Tonawanda Tomorrow group saw an opportunity to use the attention it generated to catalyze a broader reimagining of the town's future.

6.2. Support

Tonawanda Tomorrow's leadership estimated a total cost of \$266,667 for developing the plan (EDA 2016). The \$160,000 from the EDA enabled Tonawanda Tomorrow to establish itself, commence outreach, and engage consultants. According to Cindy Winland, then director of strategic priorities at Delta Institute, UBRI was well suited to provide data analysis for the project but not to carry out community outreach, so from fall 2016 through spring 2017, the Advisory Committee, under the auspices of CACWNY, sought further funding to expand the community engagement effort. It succeeded in attracting grants from the Just Transition Fund, the Energy Foundation, the Ben and Jerry's Foundation, the Rockefeller Foundation, and the Baird Foundation. The additional funding enabled Tonawanda Tomorrow to host public assemblies, procure outreach materials, and continue to finance its research effort. Tonawanda Tomorrow also benefited from in-kind contributions from CACWNY, the Kenmore-Tonawanda Chamber of Commerce, WNYALF, the Buffalo Center for Arts and Technology, and UBRI. These organizations provided a combination of staffing, outreach support, graphic design, research, and advising throughout the process (Tonawanda Tomorrow 2017).

6.3. Process

In creating a comprehensive vision for the town's future, Tonawanda Tomorrow sought to outline a strategy that was both backed by research and supported by the community. Accordingly, preparation for the final report proceeded along two tracks.

UBRI led the effort to ground the planning process in data. Researchers at UBRI compiled an economic and demographic profile of the town and tracked its development over time (Winland, interview with authors, 2020). Drawing chiefly from US Census Bureau data, they outlined the town's current economic outlook, as well as its population decline since 1970. The purpose of this exercise was to establish a starting point against which to plot the town's development. Additionally, the researchers conducted case studies on four different communities—in Missouri, Alabama, Pennsylvania, and Germany—that had recently dealt with the closure of a coal facility, seeking to elucidate best practices that might be applied in Tonawanda. Lastly, they reviewed 15 different local development plans—including the 2014 Waterfront Land Use Plan, the 2014 Town Comprehensive Plan, and the 2011 Town Economic Development Strategy—to situate the Tonawanda Tomorrow plan against the backdrop of the town's broader development strategy (Tonawanda Tomorrow 2017).

As UBRI conducted the research component of the Tonawanda Tomorrow process, the local organizations that staffed the Tonawanda Tomorrow Advisory Committee managed community engagement (Lipsitz, interview with authors, 2020). The goals were to align the recommendations of the plan with the desires of the community and to seek out new ideas for revitalizing Tonawanda's economy and land base. Between July 2016 and June 2017, the committee publicized the project through flyers, social media, email, and word of mouth; held four public brainstorming sessions; and distributed an online survey. In all, Tonawanda Tomorrow received input from over 1,000 individuals and 20 local organizations (Tonawanda Tomorrow 2017).

6.4. The Report

On May 17, 2017, Tonawanda Tomorrow released its report for public comment (Fischer 2017a). The report reviews the town's socioeconomic situation, lays out a series of strategies for development (the bulk of the report), and addresses the actions necessary to execute these strategies.

The strategies presented in the report are divided into three categories. The first category, "Economy," focuses on creating a diverse, resilient, and sustainable economic base that would reposition Tonawanda as a regional manufacturing center, while also supporting the growth of local small businesses. The second, "Workforce," involves protecting the wages, benefits, and working conditions of Tonawanda's existing workforce, while also preparing Tonawandans for the job market of the future through training and education. The third, "Placemaking," concentrates on taking advantage of Tonawanda's setting to foster a physical environment that is healthy, inviting, inclusive, and productive. For each category, the plan sets forth multiple strategies, along with "priority actions," "partnerships opportunities," and "momentum to build on" that would help Tonawanda execute them (Tonawanda Tomorrow 2017).

The plan suggests three main strategies for each category. Regarding the economic strategies, the first aimed to "position the town of Tonawanda as a regional center for sustainable manufacturing and trade" by, among other things, attracting investment from the Western New York Regional Economic Development Council, obtaining a clean energy certification from the New York State Energy Research and Development Authority, and engaging utility companies to make large sites "shovel ready" for heavy manufacturing facilities. The second would "extend support services to Tonawanda's small and medium sized businesses to export and expand" by educating business owners about foreign markets, promoting the town's reestablished Low-Interest Small Business Loan Program, and increasing participation of small businesses in trade associations. And the third would "connect businesses and entrepreneurs to our region's growing innovation ecosystem" by marketing the services of local consulting and innovation firms, setting up coworking spaces in underutilized structures, and fostering partnerships between local schools and businesses (Tonawanda Tomorrow 2017).

Concerning the workforce strategies, the first sought to "help businesses with aging workforces cultivate talent and attract new workers" by, among other things, surveying local businesses to identify workforce needs, engaging regional workforce development agencies to promote sector-based workforce development strategies, and informing hiring agents at local companies about training and education opportunities for employees. The second was to "strengthen the career pipeline for students to access jobs in Tonawanda" by raising awareness among local high school students of jobs that do not require a bachelor's degree, developing internship programs, and investing in partnerships between local businesses and schools. And the third would "create a local workforce network focused on the needs of Tonawanda workers and businesses and bringing together resources to increase access to opportunities" by identifying an external organization that could lead the effort, implementing a program that would offer assistance with online job applications, and

encouraging the Buffalo and Erie County Workforce Investment Board and the NYS Department of Labor to increase their regular presence in Tonawanda (Tonawanda Tomorrow 2017).

As to the *placemaking* strategies, the first would "cultivate tools, programs, and ownership solutions that can pave the way for increased public access to the water" by such actions as launching a community-based partnership to generate land use strategies, working with the Brownfield Opportunity Area Program to prepare sites for future use, and identifying recreation activities that would suit Tonawanda's multiuse waterfront. The second proposed to "revamp the Town's zoning code to emphasize walkability, diverse transportation options, mixed-use development, and other design principles attractive to young people and families" by promoting mixed-use development, partnering with the Niagara Frontier Transportation Authority to promote transit-oriented development, and repurposing existing auto corridors for other uses. And the third would "connect Tonawanda's recreation and tourism attractions and niches to regional destinations and initiatives" by promoting the town with Visit Buffalo Niagara, obtaining a "Playful City" certification, and examining tourism-related uses for the former Huntley property (Tonawanda Tomorrow 2017).

As is clear, Tonawanda Tomorrow plan, though ostensibly a response to the closing of Huntley, had evolved into an ambitious and comprehensive plan for Tonawanda's physical and economic revitalization. In doing so, it imagined a future in which the town would not only recover from the loss of Huntley but also develop a thriving, sustainable way of life that would drive (rather than suffer from) the transition to a green economy.

6.5. Reception and Implementation

News of the Tonawanda Tomorrow plan's publication was widely circulated in local media outlets, and the plan was subsequently adopted as one of the central strategic documents for the town's Planning and Development Department (Fischer 2017b). It received broad praise from organizations such as Greenpeace, the International Labour Organization, and the editorial board of the Buffalo News (Greenpeace 2020; ILO 2015; *Buffalo News* 2018b). The Tonawanda Tomorrow plan is notable for its wholesale adoption by the community and local decisionmakers. The strength of public consensus undergirding the plan has forced would-be developers to abide by its tenets. Emminger recalled being pleasantly surprised to learn that the proposed buyer of the Huntley site was well acquainted with the plan before signing a letter of intent. He noted that other developers had been "using it as a guide to understand what the community wants to see."

More broadly, however, the implementation of the plan has faced some challenges. Following the publication of the report, Tonawanda Tomorrow created an Implementation Team, staffed by the town, to oversee the execution of the strategies outlined. The team met regularly throughout 2018 but stalled in 2019 as a result of "staffing issues" (CACWNY 2019). In December 2019, the Clean Air Coalition, frustrated by the team's inaction, convened the organizations involved in the planning process to assess their progress on implementation (Newberry et al. 2019). The division of tasks was as follows (CACWNY 2019):

- Town of Tonawanda: tasks related to land development, accessibility, and energy
- Kenmore-Tonawanda Teachers Association: tasks related to workforce development and vocational training
- WNYALF and USW: tasks related to expanding Tonawanda's job market
- CACWNY: tasks related to sustainable development
- Tonawanda Tomorrow Implementation Team: tasks related to community engagement (the team's work stalled and it has not yet completed its tasks)

The onset of the coronavirus pandemic in 2020 threw into question the future of many Tonawanda Tomorrow–associated projects, particularly those that required significant capital expenditure (Lipsitz, interview with authors, 2020). Further, the suspension of the planned sale of the Huntley property in late June 2020 halted much of the planned redevelopment of the waterfront (Emminger, interview with authors, 2020; see Section 7.2 for more detail on the redevelopment process).

7. Outlook

7.1. Economic and Labor Market Developments

Efforts to mitigate the impacts of Huntley closing met with success when it came to employment. Every one of the 79 people who worked at the plant before its closing either found a new job or retired after the plant closed. Much of the credit for this success goes to IBEW Local 97, which worked with Huntley employees and local employers to find new jobs for those laid off and secured benefits for those who decided to retire (Pignataro 2015; Wasiura, interview with authors, 2020; Lipsitz, interview with authors, 2020).

But Huntley's closure threatened local employment in three indirect ways: an interruption in the supply of raw water or an increase in property taxes to compensate for the loss of PILOTs could have caused employers to relocate out of town, and loss of revenue to the town and school district could have forced them to lay off employees. None of these events occurred. Negotiations over the property's sale avoided any interruption in the water supply, although this arrangement is now in danger because of the sale's suspension. And the town has neither laid off employees nor raised taxes, thanks in part to mitigation funds from the state government, according to town officials (Emminger, interview with authors, 2020). The school district has laid off employees, but this is also correlated with its long-term consolidation process, which may suggest minimal impact from the Huntley closure (Habuda 2011a).

Additionally, Lipsitz said that Sumitomo Rubber added jobs to its Tonawanda facility after the water supply issue was clarified, and manufacturing employment has grown modestly in recent years. The most significant development, however, was the opening of a new Amazon distribution center in June 2020. The facility occupies 117,000 square feet and created 600 new jobs with wages of \$15/hour and up (*Spectrum News 2020*). It serves as a sign of a growing and diversifying job market in the post-Huntley years.

The shutdown of Huntley occurred against the backdrop of several complex socioeconomic trends, making it difficult to isolate the closure's long-term effects and even more difficult to predict the ultimate outcome. The plant's closure happened during an ongoing population decline in the region and reorientation of the local workforce away from manufacturing and toward a service economy. The coronavirus pandemic further complicated the post-Huntley recovery. Manufacturing has been hit particularly hard, and many planned development projects have been put on hold. A full accounting of the town's success in adapting to the closure of Huntley will likely not be possible until several years from now.

7.2. Site Redevelopment

The effort to redevelop the Huntley property has had limited success. For many in the town, redeveloping the site has been a top priority in responding to Huntley's closure, as this would provide an opportunity for new jobs and new revenue, and the site would be a linchpin in a larger riverfront reclamation plan. But the path to redeveloping the Huntley site has proved challenging.

First, NRG proceeded at what some considered to be a slow pace, waiting until March 2018 to put the site up for sale. Even then, it refused to list an asking price, suggesting it shared little of the urgency felt by local residents. Anxious to resolve the question of raw water access, the Town of Tonawanda sought to take control of the property through eminent domain beginning in September 2018 (Holmes 2019). Finally, in April 2019, NRG announced it had found a buyer. Though NRG refused to disclose details about the sale, it later emerged that the buyer was a company called WarrenBrook Redevelopment, which specialized in redeveloping power plant and brownfield sites (Watson 2021). In response, the town halted eminent domain proceedings five months later.

But on June 30, 2020—without warning or explanation—NRG announced that the sale had been suspended. The announcement shocked town officials and even, seemingly, the buyer (O'Brien 2020). In February 2022, the Town of Tonawanda once again launched eminent domain proceedings for the site (see Appendix C for more detail on the redevelopment process).

7.3. Water Supply

As of fall 2022, labor leaders and town officials expressed satisfaction with the outcome of the struggle over raw water access (Wasiura, interview with authors, 2022). Though no long-term arrangement has been unveiled, NRG has renewed its water supply contract with at least one local manufacturer and said it intended to continue supplying nearby businesses (Emminger, interview with authors, 2020).

The June 2020 announcement of the sale's suspension, however, threw the situation into turmoil once again. Though NRG still communicated its willingness to supply raw water, the suspension left the fate of the town's manufacturing activity in the hands of NRG. While this provided short-term continuity, Emminger reported that the town was in dialogue with local manufacturers regarding an arrangement that would allow the town to directly provide nonpotable water to these industrial facilities.

8. Conclusions

As the United States, and the rest of the world, proceeds with a transition to a low-carbon economy in an effort to address the threats of climate change, communities that have depended on fossil fuel production or the industrial consumption of fossil fuels (e.g., electricity generation) as an anchor of their local economy may face adjustment challenges. To address these challenges, and in an effort to facilitate a just transition, communities and policymakers can learn from those that have gone through similar processes. The civic and economic process that developed around the closure of the Huntley plant is one such example; however, due to circumstances unique to Tonawanda and the state of New York, the applicability of this case to communities embedded in larger regions undergoing energy transition may be limited. Following is a summary of some of the lessons that may be drawn from the Huntley experience:

- Start planning early. A proactive approach to transition is essential for securing
 funding, coordinating stakeholders, and planning redevelopment. By beginning
 to organize in 2013, for instance, the Huntley Alliance was able to ensure state
 support when Huntley shut down in 2016. Communities and organizations facing
 a transition should begin planning as soon as it becomes clear that a facility will
 shut down, and energy companies should endeavor to provide early warning.
- Formalize the transition. Without dedicated personnel, funding, and programming, transition planning can lack focus and easily lose momentum. To the extent possible, communities should seek to formalize the transition process through codification, budgeting, and institutionalization. One especially important type of such formalization is the establishment of a civic body (such as a committee, coalition or advisory council) tasked with engaging stakeholders, leading a deliberative process, and creating a transition plan. This can be done by government (e.g., the state of Colorado's Just Transition Advisory Committee) or by nongovernmental entities. The Huntley Alliance is an example of such formalization in Tonawanda.
- Engage a diversity of stakeholders. Within this sort of formal civic forum, it is important to engage diverse stakeholders early to ensure representation of the variety of community interests that will ultimately have a say in transition and development decisions. Unions deserve credit for many of the successes in mitigating the fallout from Huntley's closure. Thanks to IBEW, none of the workers laid off by NRG in 2016 faced extended unemployment. USW played a pivotal role in obtaining assurance from NRG that businesses would not lose access to inexpensive water supply. WNYALF and the Teachers Association were instrumental in securing mitigation funding from the state and in the crafting

- of Tonawanda Tomorrow. While union presence may vary in other locations, involving workers throughout the transition process can generate a higher degree of community buy-in and better outcomes for workers.
- Identify a common objective. Some of the community leaders we interviewed
 believe that the reason the Huntley Alliance was successful in persuading elected
 officials to provide state support was that it achieved and projected unity. The
 coalition was able to overcome ideological differences by defining a narrow
 objective on which they could agree. Defining a clear common objective at the
 outset can make the process of navigating transition proceed more smoothly
- Expect and plan for indirect and systemic consequences. As the questions over
 raw water access in Tonawanda demonstrate, coal facility retirements can set
 off a complex cascade of system effects that can have significant impacts within
 the economy and community. Such consequences will likely vary by location.
 Proactive engagement with a diverse array of stakeholders can help planners
 anticipate potential indirect consequences. Federal support for energy transition
 programs should have sufficient flexibility to address local variations.
- Procure transition funding from state and federal agencies. The retirement of a coal facility can eliminate significant portions of local government tax revenue, making it difficult to locally fund all that is required to navigate the transition successfully. Dedicated state and federal transition funding can be used to support planning and implementation, help local governments mitigate the immediate fiscal impact of the shutdown, and provide them with a window in which to plan for an economic transition. The New York EGFCMP provided this type of support to local governments that received tax revenue from Huntley. Such programs could be adopted nationwide or in other states to support communities in a similar situation.

Tonawanda is an example of what is possible when communities take a proactive, collaborative approach to transition planning. However, site redevelopment has met with challenges and setbacks, with an already drawn-out process further complicated by the suspension of a purchase agreement. One final lesson from the Huntley experience therefore may be that navigating such transitions tends to take time and persistence—and that with such persistence, positive change may be possible.

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10. Appendices

10.1. Appendix A: Timeline of Events

Table A1. Timeline of Events

Fiscal impact
 Decline and retirement
 Legislative response
 Property redevelopment
 Huntley Alliance
 Tonawanda Tomorrow
 Efforts to keep Huntley open
 Environmental impact and remediation
 Other

Date	Event
November 1916	First steam turbine completed on Huntley site.
1942	First coal-fired electric generator (unit 63) completed on Huntley site.
1948	Unit 64 completed.
1953	Unit 65 completed.
1954	Unit 66 completed.
1957	Unit 67 completed.
1958	Unit 68 completed.
July 9, 1999	NRG Energy purchases the Huntley and Dunkirk Plants from the Niagara Mohawk Power Corp. for a combined \$355 million.
April 1, 2001	NRG and ECIDA agree to a six-year payment-in-lieu-of-taxes (PILOT) agreement
March 1, 2002	2001 PILOT Agreement goes into effect
January 11, 2005	NRG settles a lawsuit brought by the state over harmful emissions by agreeing to switch to low-sulfur coal, make \$35 million worth of efficiency improvements, and retire its four oldest (and least efficient) generating units.
May 1, 2006	NRG retires generating units 63 and 64, reducing the plant's capacity from 816 to 636 MW.
November 8, 2006	NRG unveils proposal to build 680 MW integrated gasification combined-cycle clean coal power plant on Huntley grounds.
December 20, 2006	NRG proposal for a clean coal plant on Huntley grounds receives conditional support from NYPA, provided it can reduce the \$1.5 million price tag to \$1.0 million within 18 months.
June 3, 2007	NRG retires units 65 and 66, reducing the plant's capacity from 636 to 436 MW.
July 9, 2007	ECIDA approves \$115 million in bonds to help NRG install emissions-scrubbing equipment at Huntley.
March 1, 2008	The 2001 PILOT agreement expires, returning Huntley to Tonawanda's tax rolls.

March 1, 2008	The 2001 PILOT agreement expires, returning Huntley to Tonawanda's tax rolls.
July 16, 2008	NYPA revokes support of the Huntley clean coal project, citing the \$2.3 billion cost.
March 1, 2009	NRG and ECIDA agree to a 20-year PILOT agreement, to enter into force in the 2012 tax year.
March 1, 2011	NRG misses the deadline to file for tax exemption, delaying the enactment of the PILOT agreement for an additional year.
March 1, 2012	2009 PILOT agreement goes into effect, removing Huntley from Tonawanda's tax rolls until its closure.
December 31, 2012	End-of-year reporting shows that Huntley operated at 18 percent of capacity during 2012, the first time capacity factor fell below 20 percent.
Fall 2013 (1)	Peter Stuhlmiller (Ken-Ton Teachers Association) reaches out to Richard Lipsitz (WNYALF) to discuss how to protect the school district if Huntley shuts down.
Fall 2013 (2)	Representatives of WNYALF, the Teachers Association, CACWNY, the Sierra Club, IBEW, and USW meet to discuss how to mitigate the effects of Huntley closing.
Fall 2013 (3)	At the second meeting of the Huntley Alliance, Sierra Club members stage a protest calling for Huntley to be shut down, causing the coalition to dissolve for over six months.
January 28, 2014	Institute for Energy Economics and Financial Analysis releases 24- page report predicting Huntley's imminent retirement.
Spring/Summer 2014	The Huntley Alliance reconvenes and holds a series of public meetings to discuss a response to the plant closing.
Fall 2014-Fall 2015	Representatives of the Huntley Alliance make three or four trips to Albany seeking fiscal relief from the state of New York.
June 26, 2015	Governor Cuomo signs S6012, creating a \$19 million fund (later named the Electric Generation Facility Cessation Mitigation Program, or EGFCMP) to provide fiscal relief to municipalities that had lost revenue as a result of fossil fuel power plants retiring.
August 25, 2015	NRG announces that it plans to permanently retire Huntley.
October 14, 2015	NRG files with FERC for a Reliability Support Services Agreement (RSSA) to keep the plant open for four additional years.
October 30, 2015	National Grid and NYISO complete studies showing that decommissioning of both Huntley and Dunkirk plants will not have negative impacts on grid reliability.
December 28, 2015	The New York Public Service Commission requests that FERC deny NRG's RSSA application, leading to its being thrown out.
December 31, 2015	End-of-year reporting shows that Huntley operated at 11 percent of capacity during 2015.
March 1, 2016	NRG permanently decommissions Huntley.
March 31, 2016	The 2016–17 New York State budget expands the EGFCMP to \$30 million and relaxes the eligibility requirements.

March 31, 2016	The 2016–17 New York State budget expands the EGFCMP to \$30 million and relaxes the eligibility requirements.
May 2016	NRG announces that it plans to permanently retire Huntley.
July 22, 2016	NRG files with FERC for a Reliability Support Services Agreement (RSSA) to keep the plant open for four additional years.
August 9, 2016	National Grid and NYISO complete studies showing that decommissioning of both Huntley and Dunkirk plants will not have negative impacts on grid reliability.
November 10, 2016	The New York Public Service Commission requests that FERC deny NRG's RSSA application, leading to its being thrown out.
February 16, 2017	End-of-year reporting shows that Huntley operated at 11 percent of capacity during 2015.
April 9, 2017	NRG permanently decommissions Huntley.
May 17, 2017	The 2016–17 New York State budget expands the EGFCMP to \$30 million and relaxes the eligibility requirements.
November 1, 2017	Tonawanda issues an expression of interest to find potential buyers for the Huntley site.
January 23, 2018	Tonawanda releases a plan to build a \$27.2 million addition to its water treatment plant to replace the raw water supply from Huntley.
March 23, 2018	NRG lists the Huntley property for sale.
March 26, 2018	Protesters gather in front of Huntley to call for site remediation.
March 30, 2018	The 2018–19 New York State budget expands the EGFCMP to \$69 million.
August 10, 2018	Tonawanda hosts an open hearing to discuss whether to initiate eminent domain proceedings against NRG over the Huntley site.
September 5, 2018	NRG applies to the New York Department of Environmental Conservation Brownfield Cleanup Program.
September 17, 2018	Tonawanda initiates eminent domain proceedings against NRG over a portion of the Huntley property.
April 7, 2019	NRG reports that it has signed a memorandum of understanding to sell the Huntley site but refuses to name the buyer.
September 16, 2019	The Tonawanda Town Board agrees to halt the eminent domain effort to allow NRG to move forward with its sale.
September 25, 2019	NRG releases its Remedial Investigation Work Plan.
December 18, 2019	A draft amendment to the Climate Leadership and Community Protection Act directs the New York Public Service Commission to find a permanent source of funding for the EGFCMP.
January 13, 2020	NRG reveals the prospective buyer to be WarrenBrook Redevelopment, LLC.
June 30, 2020	NRG announces that the sale of the property has been suspended.
December 2020	NRG launches huntleystationreuse.com to solicit redevelopment bids on the property.

10.2. Appendix B: Further Context on Huntley's Decline

Huntley's financial decline occurred as coal generation was declining nationwide. By the end of 2015, the share of US electricity generated by coal had fallen to 33 percent, down from 48 percent in 2008 (EIA 2020). This decline was driven largely by the falling price of natural gas, as well as the increased availability of zero-marginal-cost energy sources such as wind and solar. Between 2008 and 2015, the price of natural gas for electricity generation fell by 63 percent, even as the price of coal rose by 5 percent (EIA 2021a, 2021b). The relatively high marginal costs of coal generation meant coal plants became less likely to be called on to meet demand. With lower capacity utilization, coal plants have struggled to recoup their operating costs, forcing many owners to retire them prematurely. Figure 7 shows how Huntley's capacity factor fell in the years leading up to its retirement.

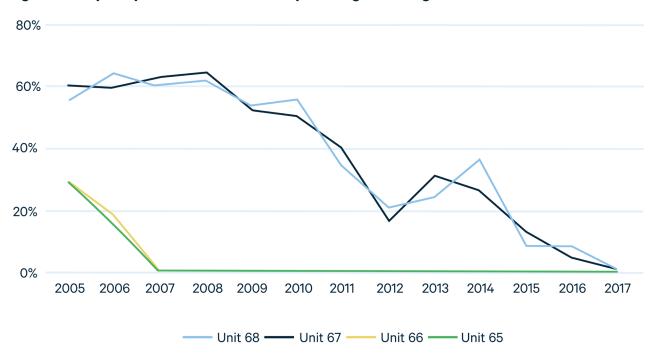


Figure 7. Capacity factor across Huntley's four generating units

Data source: FERC (2005-2016).

Environmental regulations have also driven coal plant retirements, though to a lesser extent. National policies such as the Acid Rain Program, EPA's NOx emissions caps, and the Mercury and Air Toxics Standards have driven up operating costs at coal plants by requiring owners to install pollution abatement equipment or pay penalties for emissions, though Linn and McCormack (2019) find that the effect of such regulations is significantly smaller than that of the market forces described above.

The confluence of these trends has been especially pronounced in New York. Between 2000 and 2016, the state added 1,921 MW of new wind and solar capacity and 8,384 MW of new natural gas capacity. At the same time, overall electricity demand has remained stagnant, increasing only 0.25 percent per year over the same period (EIA 2019a). This scenario has led to an increasingly competitive wholesale market and subsequently lower capacity factors at coal-fired power plants. Relatively stringent state-level regulations on carbon emissions and coal waste have made it more expensive to operate a coal plant. As a result, 15 coal power plants have been retired or mothballed in the state since 2000 (GEM 2021).

Huntley's decline coincided with the decline of several other coal facilities in the region. In 2012, NRG announced that it would mothball two of the four generating units at another coal plant it owned, the 627 MW Dunkirk Generating Plant in nearby Chautauqua County, New York. In 2013, it decided to mothball one more unit but reached an agreement with the New York Independent System Operator (NYISO) to keep the last remaining unit open until at least 2015 to preserve jobs and grid reliability (DiSavino 2013). Additionally, less than a mile from the Huntley Plant, another coal facility was encountering financial difficulties. The Tonawanda Coke Corporation, facing increasing coal costs and more stringent environmental regulations, as well as declining demand for coke, was contemplating closing down a plant that had been operating in Tonawanda since 1917. The facility ultimately closed in 2018, setting off an intensive remediation effort (EPA 2020c).

10.2.1. Major Expenses at Huntley

Data from NRG suggest that the factors that drove Huntley to shut down were the same as those driving the national decline in coal generation. In 2013, Huntley was purchasing coal at an average cost of \$30 per MWh generated, which was 18 percent higher than the market average and 30 percent more than it was paying in 2005 (Kunkel et al. 2014; EIA 2021a). Fuel costs for natural gas producers at the time were roughly \$33/MWh; since 2008, natural gas prices have declined an average of 6 percent per year (EIA 2021b).

Huntley also faced a substantial tax liability. Despite negotiating a tax exemption in 2001, NRG still paid \$8 million to \$13 million per year between 2002 and 2008 and \$14 million after the exemption expired (ECIDA 2001; Habuda 2011b). When a new PILOT agreement went into effect in 2013, the tax bill fell to \$6.1 million (ECIDA 2009). Still, with constantly decreasing margins, property tax was a financial drain on the facility.

Moreover, as Erie County's biggest polluter, Huntley was forced to swallow losses related to environmental remediation, pollution abatement, and penalties for environmental damages. Between 2005 and 2010, NRG spent \$150 million on emissions reduction measures at the plant (Pignataro 2014). The 2009 PILOT agreement cites a series of "emissions control facilities" as one of the key reasons Huntley struggled to afford its tax liability (ECIDA 2009).

10.2.2. Competition

As a result of the expenses outlined in the previous section and the increase in inexpensive electricity from renewable and natural gas generators, Huntley struggled to remain competitive in the NYISO wholesale market (Figure 8). In 2012, after years of consistently underbidding the average day-ahead price, Huntley was forced to bid above the average market price because of its operating expenses. This is a possible cause of the plant's capacity factor falling 18 percent that year. Huntley continued to bid above the average market price for the next four years as its utilization continued to decline (NYISO 2000-2019a, 2000-2019b).

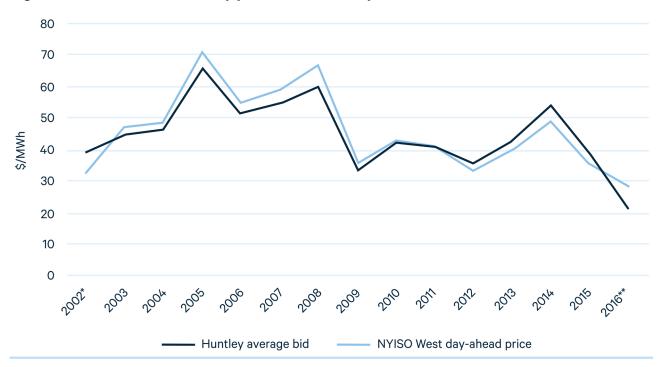


Figure 8. Wholesale electricity prices and Huntley bid

Data source: NYISO 2000-2019a, 2000-2019b. Note: 2002 includes only Q4; ** includes only Q1.

Competition in the marketplace came primarily from new natural gas plants, and the share of natural gas generation in NYISO increased in concert with coal's decline. Likewise, hydropower provided the market with an affordable source of dispatchable energy, setting the marginal price during 49 percent of the intervals in 2015 (NYISO 2002–15). With an annual demand increase of only 0.25 percent—and dispatchable demand being met by gas and hydro—there was little need for an expensive producer like Huntley to stay in the marketplace (EIA 2019b).

Any hope of compensating for lost energy revenue through the capacity market was likewise dashed. In the decade before Huntley closed, NYISO substantially increased its reserve margin, subjecting the capacity market to higher levels of competition and diminishing Huntley's ability to earn a profit by bidding into the market (Richardson 2015).

10.3. Appendix C: Huntley Site Remediation and Transfer

10.3.1. Remediation

The storage and disposal of coal on the Huntley site left significant portions of the property contaminated and in need of remediation. In 2018, in anticipation of the remediation process, Frontier Technical Associates (FTA), a private environmental consulting firm, completed a preliminary contamination assessment on the 35-acre section of the property directly south of the main generating station, the portion with the highest potential for contamination. This parcel contained the previous coal pile site, two equalization basins, one settling pond, and a soil berm along the road. Groundwater monitoring and test pits revealed soil arsenic concentrations of 100 ppm in the soil berm, 23.5 ppm in the settling pond, 64 ppm in the equalization basins, and 65 ppm by the generating station (FTA 2018). The EPA soil cleanup level for arsenic is 3 ppm (EPA 2001). Arsenic contamination occurs when the heavy metal leaches out of high-sulfur coal; when present in the soil, arsenic is known to cause multiple types of cancer (DHSS 2013). FTA also found petroleum contamination in the soil beneath where the coal pile had once stood. Petroleum contamination harms plant growth and can cause liver damage in humans (Wang et al. 2017).

Remediation of the site has proved to be a tortuous process. Following the shutdown in 2016, NRG removed the large coal stockpile on the property but seemed to take no further action for over a year. There are indications that the New York State Department of Environmental Conservation (NYSDEC) was examining the site during this time, though the agency has provided few details as to its activity there. By spring 2018, community members had become frustrated with the lack of activity (Haight 2018). On March 26, activists and community members led by CACWNY assembled at the plant to call for action. At the same time, members of the Tonawanda Tomorrow advisory council—including Newberry, Emminger, Stuhlmiller, and Catherine Piciulo from the Chamber of Commerce—publicly urged NRG to apply for NYSDEC's Brownfield Cleanup Program (Desmond 2018; Emminger 2019; Haight 2018; Piciulo 2020). In response, NRG issued a statement saying, "We appreciate the interest of the Tonawanda community regarding the future of the Huntley site. NRG has been working with the New York State Department of Environmental Conservation (DEC) for some time on formal plans for the decommissioning and closure of the Huntley site, consistent with all applicable federal and state laws and regulations" (Haight 2018).

NYSDEC's Brownfield Cleanup Program (BCP) is designed to "encourage private-sector cleanups of brownfields and to promote their redevelopment as a means to revitalize economically blighted communities" (NYSDEC 2020a). Companies involved in the program receive tax deductions in return for cleaning up a site and preparing it for redevelopment. The alternative to the BCP would have been to allow the federal government to designate Huntley a superfund site and let EPA spearhead its remediation. Local leaders saw BCP as a way to both expedite the remediation process and allow the community to have a hand in its preparation for redevelopment, as called for in the Tonawanda Tomorrow plan.

On September 5, 2018, NRG submitted an application to the BCP that, per NYSDEC guidelines, was subject to a 30-day public comment period (NYSDEC 2018, 2019b). On March 8, 2019, it submitted a Citizen Participation Plan, as required by NYSDEC, outlining the process by which community members could contribute to the site's remediation (NYSDEC 2019a). Following the 30-day comment period for the Citizen Participation Plan, NRG set about constructing a Remedial Investigation Work Plan, in which it outlined the process by which it would assess the site's level of contamination. This report was made public on September 25, kicking off a 45-day comment period (CACWNY 2018).

During the second half of 2020, GZA GeoEnvironmental, an environmental consulting firm, conducted a remedial assessment on the property in satisfaction of the Remedial Investigation Work Plan NRG submitted to NYSDEC. The plan requires testing of subsurface utilities, settling pond sediment, surface soil, subsurface soil, and groundwater. The firm tested for volatile organic compounds, heavy metals, polychlorinated biphenyls, pesticides, herbicides, cyanide, polyfluorinated alkyl substances, and dioxane. At the end of 2020, NRG submitted a Remedial Investigation Report to NYSDEC, along with a proposed Remediation Work Plan. Both documents were made public after NYSDEC affirmed the analytical results of the investigation (NYSDEC 2021). After a 45-day public comment period, the Remediation Work Plan was finalized, allowing NRG to kick off roughly a year of site remediation. NRG presented NYSDEC with a Final Engineering Report and a Site Management Plan in the second half of 2022 (GZA 2019).

10.3.2. Redevelopment Opportunity

For the duration of Tonawanda's history, access to the Niagara River had been a major lifeline, and the current layout of the town reflects this. The bulk of Tonawanda's heavy industry is concentrated along the river. The town's waterfront currently hosts (in addition to Huntley) an oil refinery, a cement plant, a water treatment plant, and multiple trucking companies. While marinas and a small riverside park provide the public with some access to the river, much of the town's waterfront remains given over to industry. Emminger noted, "Water is our town's biggest asset, and over the past hundred years we haven't taken advantage of it."

Thus the Huntley property posed both an opportunity and a challenge. With over 100 acres of waterfront property and an unobstructed view southward toward Grand Island and the Canadian border, Huntley was, in Emminger's words, "a generational property. This is something that comes along maybe once every hundred years in our municipality." It was indeed a valuable property—in 2015, the Town of Tonawanda Assessor's Office placed a \$488.2 million market value on the site (Watson 2019c). A well-planned redevelopment effort could provide Tonawanda residents with improved

⁷ Satellite view of Tonawanda, New York, Google Maps, accessed fall 2020, https://www.google.com/maps/place/Tonawanda,+NY/@42.9769034,-78.9438273,6538m/data=!3m1!1e3!4m5!3m4!1s0x89d36c537c686f33:0xdb431ff1a5ebc3e6!8m2!3d42.989131!4d-78.8722341.

access to the waterfront, while also adding jobs and tax revenue. Community members involved in the Tonawanda Tomorrow process expressed a desire to "make Huntley and the rest of the waterfront a destination," and 91 percent of survey respondents favored investment in improving waterfront access (Tonawanda Tomorrow 2017). Stuhlmiller said he hoped redevelopment would "transform this 100-acre site into an economically viable contributor to the community" (Haight 2018). Therefore, town planners sought to remediate and redevelop the site as quickly as possible.

10.3.3. Seeking a Buyer

By the beginning of 2017, NRG had not yet listed the site for sale, and local leaders were becoming impatient. As a result, Emminger set about to find a buyer himself. In the past, the Buffalo-Tonawanda region had struggled with congestion on its electricity transmission lines. Wondering if the site could perhaps be used to alleviate some of that congestion, Emminger approached the New York Public Service Commission (NYPSC) to see if it would be interested in taking over part of the property. The NYPSC declined but recommended that the town issue an expression of interest, inviting third parties to propose redevelopment strategies for the site. This would, according to Emminger, be a highly unusual step. Tonawanda did not own the property and thus would not be able to act on any responses it received. Nevertheless, Emminger realized it could be a way for the town to force NRG's hand (Emminger 2019).

Emminger did not act on this recommendation immediately. In 2016, NRG and Tonawanda had settled on a \$13 million valuation for the Huntley property, reducing NRG's tax bill to roughly \$500,000. Under this new valuation, NRG was entitled to \$2.5 million in tax refunds from the town and the school district. After meeting with town officials, the company agreed to forgo the refund. Accordingly, Emminger held off on issuing an expression of interest for the first half of 2017 out of goodwill toward NRG (Emminger 2019).

But by fall 2017, NRG still had not put the site up for sale, nor had it laid out a redevelopment plan, so the town decided to press ahead. On November 1, Tonawanda issued a formal expression of interest that read, "The main objective of this Expression of Interest is to examine the possibility of repurposing the Huntley site as a national model for the effective re-use of former fossil fuel sites in the development of climate change-sensitive renewable energy development. A secondary objective is to potentially repurpose and maximize the infrastructure present on the site and surrounding area" (Town of Tonawanda 2017b).

According to Emminger, the town received eight responses from developers all over the country in short order. Without ownership of the site, the town could do little with the responses beyond forwarding them to NRG, but they allowed its leadership to exert pressure on NRG to expedite the process.

10.3.4. Eminent Domain Proceedings

NRG put the Huntley site up for sale on March 23, 2018, but refused to list an asking price, suggesting it was not motivated to expedite the sale (Robinson 2018). By August, no visible progress had been made, so the town began to consider other steps to move the process along. On August 10, the town hosted an open meeting to discuss the possibility of using eminent domain to take over the Huntley site (Watson 2018a). The proposal received mild support among residents and local employers. On September 17, with uncertainty over the issue of raw water access heightening (and NRG refusing to provide clarity), the Town Board voted to initiate eminent domain proceedings and hired the law firm Hopkins, Sorgi, and Romanowski to assist (Watson 2018c).

Emminger published a letter in the *Buffalo Times* on September 5 saying, "The town is exploring obtaining a temporary easement using eminent domain on the water intakes and water lines only" (Emminger 2018). Emminger noted that efficient site redevelopment was also a consideration, and in announcing a public hearing on the issue, the town declared that the eminent domain effort was "to secure the property to ensure its timely and appropriate redevelopment, provide public access, prevent blight through vacancy and to provide continued access to critical raw water supply for the Town of Tonawanda" (Holmes 2019). Although the water supply question was ostensibly the direct catalyst for the town's initiating eminent domain proceedings, site redevelopment was clearly a central concern in the effort.

NRG strenuously objected to the eminent domain effort, arguing that the measure was "substantively and procedurally flawed" (Holmes 2019). "We are concerned that it may actually render counter to the community's interests, and that every step the town takes toward condemning the site potentially dissuades qualified buyers from continuing negotiations with NRG," said an NRG spokesman (Brecher 2019). But the Town Board continued to move ahead with the proceedings, formally expanding its focus from just the water intake to the broader riverside property. The board scheduled a vote on whether to formally kick off the legal effort on March 25, 2019, but shelved the measure at the last second to give NRG more time to find a buyer.

On April 8, the *Buffalo News* reported that NRG had found a buyer. While acknowledging that a letter of intent had been signed, NRG refused to name the buyer or disclose other details of the arrangement, saying, "NRG does not comment on early stage sales processes" (Watson 2019a). Emminger and other town officials pressed NRG to release the name, hoping to discuss tax incentives and redevelopment plans with the buyer. Receiving nothing from the company, and still concerned over the future of water rights in the town, the board on June 25 voted to formally initiate legal proceedings against NRG. NRG reiterated its earlier opposition to the move, saying, "We are disappointed that the town felt the need to move forward with the eminent domain process and are concerned that it may actually run counter to the community's interests" (Watson 2019b).

On September 16, 2019, NRG reached an agreement with the town to halt the legal battle. The agreement would allow NRG to expedite the process of selling the site (Watson 2019d). On January 13, 2020, NRG said in a statement that it planned to sell the site to a company called WarrenBrook Redevelopment, though it did not provide any further details about the buyer. Investigative reporting by the *Buffalo News* later revealed that WarrenBrook was a project of Mike Ullian and Mike Edman. Ullian had previously redeveloped retired power plants in Bridgeport, Connecticut, and New Orleans and a brownfield site in Miami (Watson 2021). Emminger expressed satisfaction at the news. Despite racking up a \$24,223 legal bill in the process of the eminent domain battle, the effort had spurred action on NRG's part, which, in Emminger's telling, was the ultimate goal (Watson 2020). "We forced their hand with the eminent domain," he said.

10.3.5. Subsequent Developments

On June 30, 2020, however, NRG announced that the sale of the property had been suspended. The company refused to provide details but said it was still committed to finding a buyer (O'Brien 2020). Emminger admitted to being both disappointed and confused by the declaration, saying that both parties to the deal seemed to have an interest in getting it done. When interviewed by the *Buffalo News*, Ullian likewise seemed not to understand why the deal had been called off. In December 2020, NRG launched a website to solicit bids from potential redevelopers and has since hired a consulting firm called Vita Nuova to guide the selling process (Watson 2021).

As of this writing, no further explanation has been given for why the deal was called off. According to Emminger, NRG should have an interest in getting rid of the property, as the company makes slightly more than \$1 million per year on selling raw water but pays \$500,000 a year in taxes plus a similar amount in remediation costs, so it is unlikely that NRG is turning a profit on the site. And with mitigation funding running out in 2023, Emminger saw an urgent need to redevelop the site. In February 2020, the town agreed to a six-month moratorium on refiling an eminent domain measure out of goodwill toward NRG. When we spoke with Emminger in July 2020, he expressed a belief that eminent domain would once again be necessary to ensure redevelopment.

Through the remediation and redevelopment process, NRG has established a reputation for difficulty and opacity. When the plant closed down, the company showed little to no interest in proactively planning for the site's future. NRG has remained in compliance with NYSDEC's remediation requirements but kicked off the process only at local residents' urging. Moreover, Emminger estimated that NRG reached out to provide him with information roughly every 18 months, leaving the town's government largely uninformed.

