

Planning for Coal Power Plant Transition: Lessons Learned From Communities in Massachusetts

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Abstract

As coal-fired power plants across the U.S. are retiring in increasing numbers – a trend likely to continue in the years ahead – the communities that host these plants will play a critical role in balancing local concerns about public health, tax revenue, jobs and economic development with broader issues of fossil fuel dependence and climate change. This thesis investigates how three municipalities in Massachusetts are planning around the potential reuse and redevelopment of their coal plant sites. How are different stakeholder interests being convened and working together in these communities? What kinds of processes for public engagement are in place? Are these stakeholder and public engagement processes leading to politically viable outcomes? This thesis finds that active engagement of government officials, diverse and inclusive stakeholder tables, clear opportunities for public engagement and provision of adequate resources are all critical to credible, effective and sustained community processes around coal transition planning. Coal communities in Massachusetts vary in the extent to which they meet these criteria, but none of them are currently maximizing the potential for collaborative problem-solving around coal plant reuse. I conclude that consensus building presents a promising approach by which these municipalities might develop collective visions for coal plant reuse and create clear and actionable pathways towards sustainable redevelopment.

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Chapter 1: Introduction

Pollution from coal-fired power plants has long been recognized as a leading threat to public health and contributor to climate change (Lockwood et al 2009), leading to widespread activist campaigns to phase out coal burning (Sierra Club 2013). In recent years such efforts and other economic and political trends have caused coal's share of the electricity generation portfolio in the U.S. to decline significantly, leading to uncertainty about its long-term prospects. Coal currently faces increased financial risks from a variety of sources, including increasing costs of compliance with environmental regulations and uncertainty about future compliance costs, declining prices for natural gas, upward price pressures and price volatility, high construction costs for new coal plants and increasing competitiveness from renewable energy sources (Lowe and Galland 2012). As a result, coal currently comprises only 39 percent of U.S. electricity generation, down from 52 percent in 2000 (U.S. EIA 2012). This downward trend is likely to continue in the years ahead; as of July 2012 approximately 30 gigawatts (GW) of coal capacity – a figure representing 10 percent of current coal generation – was scheduled to retire by 2016, and that number is likely to increase if current market conditions persist (Celebi, Graves and Russell 2012).

Coal's decline has been accompanied by a surge in domestic natural gas production from newfound shale deposits in states like Pennsylvania, Ohio and West Virginia. From 2000 to 2012 gas's share of the U.S. electricity mix more than doubled from 16 percent to 34 percent – just shy of coal's current 39 percent share (U.S. EIA 2012). Celebi, Graves and Russell (2012) suggest that a large portion of retiring coal capacity will be replaced by gas generation, which is often perceived as cleaner than coal. However Lowe and Galland

(2012) caution that in the long term gas will face many of the same financial risks that coal currently faces, and the Union of Concerned Scientists (2012) argues that “a wholesale switch [from coal] to natural gas is not a long-term solution to the climate problem,” noting that gas still causes significant carbon dioxide emissions and that hydraulic fracturing processes to extract gas raise significant environmental and health concerns. As coal plants across the country retire in increasing numbers, the communities that host these plants will have to balance local concerns about public health, tax revenue, jobs and economic development with broader issues of fossil fuel dependence and climate change. It remains to be seen whether local coal transition plans on the ground will simply replace coal with gas or truly ensure a just transition “from a fossil-fuel based economy to a renewable energy-based economy” (EJCC 2002).

While much of coal’s decreasing viability has been driven by the energy market and economic trends noted above, grassroots activism has played an important role as well. Hertsgaard (2012) details how community activists have effectively leveraged coal’s economic vulnerabilities into powerful political arguments to block the construction of new coal-fired power plants and increasingly, to retire existing ones. As of July 2010 organizers associated with the Sierra Club’s Beyond Coal campaign had prevented the construction of 132 coal plants; as the campaign shifts its efforts to shut down current plants, Hertsgaard notes the local economic challenges inherent in coal transition. He mentions River Rouge, Michigan, where environmental activists, union officials and community groups are coming together to address concerns over loss of jobs and tax revenue, as one illustrative example of these issues, highlighting a broader need for effective planning to ensure sustainable redevelopment.

Similar to River Rouge, diverse stakeholder groups in Massachusetts are increasingly tackling the challenges involved in coal transition. This thesis explores how three communities in Massachusetts – Salem, Somerset and Holyoke – are approaching the potential reuse and redevelopment of their coal plant sites. Specifically, I examine how different stakeholder interests are being convened and working together in these communities, what kinds of processes for public engagement are in place, and whether these stakeholder and public engagement processes are leading to politically viable outcomes. Consensus building provides a powerful analytic frame to examine these issues given its strong emphasis on bringing diverse parties to the table as part of public decision-making processes. I draw upon the work of Chris Carlson, who in *The Consensus Building Handbook* (Susskind et al 1999) outlines a four-part methodology for convening stakeholders as part of consensus building efforts: assessing the situation, identifying and engaging participants, locating the necessary resources to support the process, and planning and organizing the process.

Carlson contends that “everyone with a stake in the decision should be represented at the table.” However she also cautions that initial assessments may demonstrate that some other process besides consensus building should be pursued, and that differences in power between groups pose challenges to ensuring truly representative decision-making processes. While consensus building may not be appropriate in every context, Carlson nonetheless provides a relevant framework to address questions of how stakeholders are being convened in coal communities, who is and is not participating, what different groups’ resource needs are for effective participation and how differences in power are being addressed. Her detailed approach to convening stakeholders represents the first phase of a

broader five-step methodology to consensus building, which includes subsequent phases of assigning parties roles and responsibilities, facilitating group problem solving, reaching agreement and holding parties to their commitments (Susskind and Cruikshank 2006). This approach, Susskind and Cruikshank argue, presents “a way for a group or organization to reach a nearly unanimous agreement, and then implement that agreement successfully” (p. 3). Whether coal transition planning processes in Salem, Somerset and Holyoke – the only remaining communities in Massachusetts with active coal plants – are meeting these ideals is a central question that animates this thesis. Brief summaries of each community’s current situation are as follows:

- **Salem (pop. 41,000):** In 2010 the City of Salem issued a request for proposals for a study to assess land use and redevelopment options at the 745 megawatt (MW) Salem Harbor Station and ultimately secured state funding to do so. As the study was underway in May 2011 Dominion Energy, the plant owner, announced that it would shut down two of Salem Harbor’s four generating units at the end of the year and the other two by June 2014. Salem’s study was completed in January 2012; the following month, Dominion announced that they were in negotiations to sell the Salem Harbor site to New Jersey-based Footprint Energy, a company seeking to build a new 630 MW gas plant there. The sale was completed in August 2012 and Footprint’s proposal is currently making its way through state and local regulatory processes.
- **Somerset (pop. 18,000):** Somerset for decades hosted two coal plants, the 174 MW Montaup Station (previously owned by NRG Energy) and the 1,580 MW Brayton

Point Station (currently owned by Dominion Energy). Facing a state order to either convert to cleaner fuel or shut down, Montaup closed in January 2010 and the site was sold to New Jersey-based Asset Recovery Group in February 2012 for redevelopment preparations. The property currently lies dormant despite proposals from local residents to envision a mixed-use development and from Beverly-based Jan Schlichtmann (the lawyer of *A Civil Action* fame) to develop a marine biology research facility. (Schlichtmann also pursued this proposal in Salem, where it received less interest from local officials.) Brayton Point, the largest fossil fuel-burning facility in New England, ran at only 16 percent capacity through the first 11 months of 2012 and was put on the market for sale in September of that year, leading activists to call for clean redevelopment at that site (Chesto 2012). In March 2013 Dominion announced the sale of Brayton Point to a subsidiary of funds controlled by Energy Capital Partners, a private equity firm; the sale was expected to close in the second quarter.

- **Holyoke (pop. 40,000):** Similar to Brayton Point, the 136 MW Mt. Tom Station in Holyoke has been running at only a fraction of its capacity in recent years, leading to a renewed push from local activists to shut it down (WGGB 2012). In April 2012 the City of Holyoke created a Community Advisory Group to start exploring redevelopment options at the plant site, and the city and state legislators are also attempting to secure funding to pursue a redevelopment study similar to Salem's. In March 2013 the New England grid operator, ISO-New England, approved a dynamic de-list bid for Mt. Tom from GDF Suez, the plant owner. This development will enable Mt. Tom to leave the energy market for 2016-2017 and has led to arguments

that the plant could retire permanently without threatening the electricity grid (Coal Free Massachusetts 2013).

Current efforts to address coal plant transition in Salem, Somerset and Holyoke represent the latest chapter of a robust history of grassroots activism around coal-fired power plants in Massachusetts. The roots of contemporary planning processes date back to a successful late 1990's coalition effort of over 100 local and statewide faith, health and environmental organizations to enact strong pollution regulations on an aging group of "Filthy Five" power plants (including all the aforementioned plants) that were exempt from federal Clean Air Act standards. In July 2012 many of these organizations launched a new Coal Free Massachusetts campaign, calling for the following goals that go well beyond power plant cleanup:

- Phase out all of Massachusetts' coal-fired power plants by 2020;
- Advance energy efficiency and clean renewable energy like responsibly sited wind and solar to support the transition from coal electricity generation in Massachusetts;
- Partner with and empower community leadership and vision for clean energy and clean-tech development for our host communities, including robust transition plans focused on the long-term health of the community, innovative opportunities for growing the green economy, and transitional support for workers and municipal revenues (Coal Free Massachusetts 2012).

In addition to grassroots activism, state policy is also shaping the broader context around coal transition in Massachusetts. Energy efficiency policies enacted under the Green Communities Act of 2008 have significantly reduced the demand for energy from coal-fired facilities, and the Global Warming Solutions Act of 2008 calls for reducing greenhouse gas emissions 25 percent below 1990 levels by 2020, creating a clear regulatory mandate to address coal plant pollution. In July 2012 during legislative debate over a clean energy bill, “An Act Relative to Competitively Priced Electricity in the Commonwealth,” State Representative and Energy Committee Chairman John Keenan (D-Salem) inserted a provision (Section 42) that would have required energy distributors to enter into long-term contracts to purchase power from companies building new generating facilities on old oil or coal plant sites. The proposal was criticized as a “sweetheart deal” for Footprint Energy’s proposed gas plant at Salem Harbor and was strongly opposed by consumer groups, environmentalists, the energy industry, Governor Deval Patrick and Attorney General Martha Coakley (Roman 2012). As a compromise Section 42 was reframed to create a state-level coal plant revitalization task force to develop plans for the deconstruction, remediation and redevelopment of Salem Harbor Station and other potentially retiring coal plants in Massachusetts.

Coal Free Massachusetts (2012) has criticized the task force for lacking a seat at the table for the public and residents of coal communities and has called upon the body to establish a clear process for public participation. This critique and the controversy over Section 42 both highlight the contested nature of stakeholder and public engagement around coal plant revitalization in Massachusetts, which is a theme that repeatedly emerges throughout this thesis. Chapters 2, 3 and 4 of this thesis provide in-depth case

studies of Salem, Somerset and Holyoke respectively. I present overarching narratives of coal transition planning processes to date in each community and conclude each chapter with a discussion of important themes, challenges and topics for further consideration. Chapter 5 synthesizes my findings across these three cases. I also integrate further discussion of the state task force in Massachusetts and its role in supporting local planning processes, as well as an overview of a coal task force in Chicago that highlights the potential for consensus building approaches to deliver meaningful results. Chapter 6 presents some concluding thoughts on additional issues to consider with respect to coal transition planning, including the potential for regional processes around site redevelopment and the broader implications of state-level energy and sustainability policies.

Based upon my study of Salem, Somerset and Holyoke, I identify four criteria that are critical to credible, effective and sustained community processes around coal transition planning: active engagement of government officials, diverse and inclusive stakeholder tables, provision of adequate resources and clear opportunities for public engagement. I further find that these criteria correspond to the four stages of Carlson's (1999) framework for convening stakeholders as part of consensus building processes: *assessing the situation* highlights the need for government officials as well as other parties to be proactive in understanding their community contexts and to act accordingly, strategies for *identifying and engaging participants* affect who is included in stakeholder efforts, *locating the necessary resources to support the process* is self-explanatory, and frameworks for *planning and organizing the process* have strong implications for how the broader public is involved. Examples from Massachusetts communities show that government officials are well-positioned to initiate planning processes and bring stakeholders together, and that their

active involvement helps ensure that these processes continue to move forward. The extent to which planning processes include diverse stakeholders and provide opportunities for public engagement has strong implications for how they are perceived politically, as well as whether they are effective in reflecting and synthesizing a broad range of community opinion. Finally, staff and financial resources are critical to directly support planning processes on the ground and to build the technical capacity of stakeholders and the public to understand potential coal plant redevelopment options.

Coal communities in Massachusetts vary in the extent to which they meet the aforementioned criteria as part of Carlson’s methodology for convening. When their planning processes are considered in the context of Susskind and Cruikshank’s (2006) broader framework for consensus building, it becomes clear that they are not maximizing the potential for collaborative problem-solving. To put it simply, stakeholder and public engagement strategies in Massachusetts to date have not been oriented towards developing collective visions for coal plant redevelopment. While many processes have started with lofty goals, they have often been constrained by a lack of resources or a lack of engagement with key decision-makers, limited in scope to consider specific proposals around coal plant reuse, or caught up in political controversy due to concerns over stakeholder and public representation. In some cases planning processes have stalled completely due to these challenges. The comparison case of Chicago, described in Chapter 5, provides insights into how a consensus-based approach can help address such barriers and create clear plans for sustained action that hold individual stakeholders accountable to commitments to the larger group. There arguably is similar potential for communities in Massachusetts to integrate aspects of consensus building as planning processes move

forward in the future, especially with respect to bringing in outside facilitation and pursuing joint fact-finding to reach a shared understanding of community contexts and redevelopment options.

As I complete this thesis the state task force's final reports on Salem Harbor Station and other coal-fired facilities in Massachusetts are still pending, and the future redevelopment trajectories of Salem, Somerset and Holyoke are still very much to be determined. It is my hope that this thesis will be a useful and timely addition to the ongoing dialogue about coal transition in Massachusetts, and that the lessons learned will be helpful to communities elsewhere dealing with these issues.

Chapter 2: Salem

"I will not create jobs or hold jobs that kill people. And that plant kills people."

--Massachusetts Governor Mitt Romney at a press conference outside Salem Harbor Station, February 6, 2003

Over ten years after Governor Romney delivered the remarks above, the 61-year-old Salem Harbor Station is finally set to shut down on June 1, 2014. This imminent retirement has galvanized a larger conversation about coal plant transition in Massachusetts and spurred a planning process for redeveloping Salem Harbor that local officials suggest could be a model for other coal plants in the state (Driscoll 2013). However, a proposal to replace the coal plant with a new gas-fired power plant has created controversy and raised larger questions about how communities might envision the reuse of their power plant sites. The case of Salem, which represents the first high-profile example of coal transition in Massachusetts, therefore highlights important considerations for state policymakers and other communities as they begin and continue to explore issues of coal plant revitalization.

Activating the Grassroots

Salem Harbor Station has been burning coal since it first started operations in 1952, and the 745 megawatt power plant site today commands 65 acres of waterfront property directly adjacent to dense residential neighborhoods. For most of its history Salem Harbor attracted little notice from its neighbors and members of surrounding communities. This changed greatly in the mid-1990's, however, when local concerns over pollution and cancer

in nearby Marblehead helped galvanize what today has become a state-level effort to retire and transition Salem Harbor Station and potentially other coal plants in Massachusetts.

During the summer of 1997 Marblehead residents began noticing deposits of soot around their homes, and that December a Massachusetts Cancer Registry report was released documenting significantly higher cancer incidence in Marblehead from 1987 to 1994 compared to expected levels (Ehrlich 2013, Massachusetts Cancer Registry 1997). Public concern over these issues led to a focus on Salem Harbor Station as a source of environmental pollution, and Ehrlich and other Marblehead residents formed the community organization HealthLink to address potential health threats related to the power plant (Ehrlich 2013). With organizing support from the statewide environmental organizations Clean Water Action and MASSPIRG, HealthLink soon joined a campaign for stronger regulations on pollution from the dirtiest power plants in the state, known as the Filthy Five. (In addition to Salem Harbor Station, these plants included Montaup and Brayton Point Stations in Somerset and Mt. Tom Station in Holyoke.) The effort bore fruit in 2001 when Massachusetts became the first state in the nation to finalize comprehensive power plant regulations covering emissions of nitrous oxides, sulfur oxides, mercury and carbon dioxide.

In addition to supporting state-level campaigns, HealthLink has also built local alliances around environmental issues. Recognizing the value of having people inside Salem engage around the power plant, HealthLink helped create the Salem Alliance for the Environment (SAFE) in 2000 (Bright and Nadeau 2013). The two organizations have shared many members and worked together closely for over a decade, with SAFE often

taking a self-described “practical” approach and HealthLink providing a more “strident” voice and focusing on mobilizing public pressure (Bar-Snell 2013, Bright and Nadeau 2013). The two organizations have collaborated on many occasions to continue pushing for the cleanup of Salem Harbor Station and the enforcement of pollution regulations, and their focuses have broadened over time to include climate change in addition to the health and toxics concerns that originally motivated their formation. More recently, however, with the power plant finally on the verge of shutdown, SAFE and HealthLink have taken different positions on the future of the Salem Harbor site, which will be described more at length later.

Shifting the Dialogue Towards Alternatives

On November 6, 2007 a rupture in a boiler pipe at Salem Harbor doused plant workers Matthew Indeglia, Philip Robinson and Mark Mansfield with superheated water and steam, killing the three men. In the wake of this tragedy the state ordered the plant to close for several months, and a follow-up investigation by the Occupational Health and Safety Administration found ten safety violations at the plant. The accident created a fundamental shift in the public conversation around the future of Salem Harbor:

For most of [the past] 15 years we never thought the plant would ever leave. The explosion was a major turning point. We had to deal with the reality that this plant was three decades beyond its useful life and now was a hazard to the point where it was killing people. Most of us were just calling for cleanup until that point, but then we shifted to saying we want the plant to shut down.

--Lori Ehrlich (2013)

The day after the explosion Ehrlich, who had been weighing a run for state representative due to concerns over the coal plant, formally announced her candidacy (Ehrlich 2013). She would go on to win election and she remains in office as of this writing. The months that followed the accident at the plant also saw the emergence of new campaign efforts Stop the Plant Now (led by Marblehead resident Susan Livingston) and A Vision for Salem (led by Salem resident Lisa Abbate) to call for the shutdown and reuse of Salem Harbor Station. The two groups circulated renderings reimagining the power plant site as a world class center for alternative energy manufacturing, research and development (Stop the Plant Now 2008). In addition Livingston bankrolled billboard and newspaper ads across the North Shore with the slogan “Stop the Plant. Save the Planet.” and along with Abbate commissioned a September 2008 study by The Brattle Group, a Cambridge-based economics and financial consulting firm, to explore the potential economic impacts of redeveloping the site (Rosenberg 2008, Dalton 2008). The report assumed that 42 acres of the site could be repurposed as a mixed-use development – including single-family homes, apartments, a hotel, retail and office space and a city-owned marina – that would bring Salem \$4.6 million in annual property taxes and revenues and \$12.7 million in broader economic benefits, while creating 300 short-term construction jobs and 600 long-term jobs (Brattle Group 2008). Abbate noted that the Brattle Group study was not supposed to be prescriptive about the future of Salem Harbor, but instead was intended to mark “the beginning of a dialogue about vision and possibilities” (Dalton 2008).

The study and the public relations campaign were not particularly well-received by political leaders in Salem. The Brattle Group report was criticized for ignoring regulatory

constraints at the Salem Harbor site (Taormina 2013), which will be further discussed later in this chapter. In addition Salem Mayor Kim Driscoll (2013) characterized the study as an attempt to “shame the city into thinking about the site differently,” and members of SAFE suggested that Livingston’s ad campaign was perceived as “wealthy Marblehead residents telling the people of Salem what to do in a time of budget crisis” (Bar-Snell 2013). Nonetheless the drumbeat for investigating alternatives to the coal plant continued to build. SAFE published an open letter calling for a reuse study (Bar-Snell 2013) and members of HealthLink and the press both suggested that the Brattle Group report helped create the impetus for the City of Salem to explore potential redevelopment options (Bright and Nadeau 2013, Phelan 2010). Eventually Salem would move forward with its own investigation into reuse possibilities, and that effort is detailed below.

Investigating Reuse Options

In 2010 the City of Salem issued a Request for Proposals for “Consulting Services for a Site Assessment Study on Potential Land Use Options at the Salem Harbor Power Station Site.” The city approached the Massachusetts Clean Energy Center to secure a \$200,000 grant to fund the study and then selected the engineering firm Jacobs as the lead consultant and project manager, with Sasaki Associates, LaCapra Associates and Robert Charles Lesser Co. contributing as well. The “Jacobs study” marked Salem’s first official step towards proactively planning for coal transition.

The Jacobs study process unfolded as the future of Salem Harbor Station was becoming increasingly uncertain. In January 2010 the Conservation Law Foundation, a prominent Boston-based environmental organization, announced plans to sue Dominion

for alleged Clean Air Act violations at the plant, leading activists to call upon Dominion to clarify its long-term intentions (Guerriero 2010). In November 2010 a Dominion executive stated that he expected Salem Harbor Station to shut down within the next seven years in response to forthcoming EPA ozone regulations (DiSavino and O’Grady 2011), and that fall the company also filed a permanent de-list bid with the regional grid operator, ISO-New England, to withdraw the plant from an upcoming New England-wide energy auction in June 2011. Dominion’s move was seen as “the beginning of the end of coal-fired electric power generation in Salem” by then-Secretary of Energy and Environmental Affairs Ian Bowles (Dalton 2010). This prediction was realized in May 2011 when Dominion, faced with running an increasingly uneconomic plant, announced that it would shutter two of the generating units at Salem Harbor by the end of the year and the remaining two by June 1, 2014 (Guerriero 2011). In response to concerns about maintaining the municipal tax base, State Representative and Energy Committee Chairman John Keenan (D-Salem) and then-State Senator Fred Berry (D-Peabody; his district also included Salem) passed a state budget amendment that would compensate Salem through 2016 for any shortfall between Dominion’s most recent \$4.75 million payment in taxes and fees and the expected reduced payments in future years through 2016 (Dalton 2011).

Dominion’s retirement announcement gave the Jacobs study effort added urgency. In contrast to the Brattle Group report the study proceeded with full buy-in from Salem officials, who assembled a local stakeholders group (summarized in Table 2.1) to advise the process. The group met five times in 2011 to help the city achieve its goals of “understanding the site and regulatory constraints that will affect redevelopment, identify land use opportunities based upon market analysis and a potential overall framework for

achievable redevelopment” (Jacobs et al 2012, p. 11). The stakeholder group did not include any individuals or representatives from organizations outside Salem; in a May 18, 2011 newspaper column Rep. Ehrlich noted that she “was not permitted to participate in [Salem’s] study” and encouraged readers to contact her to ensure that any visions they had were considered (Ehrlich 2011). HealthLink also remained relatively uninvolved in the Jacobs study, suggesting that the process had to be Salem-focused to have credibility (Bright and Nadeau 2013).

Table 2.1: Stakeholders for Jacobs Study

Name(s)	Affiliation
Fred Berry	State Senate
John Keenan	State House of Representatives
Charles Payson	Office of Congressman John Tierney
Joanne McBrien	MA Department of Energy Resources
Richard Chalpin	MA Department of Environmental Protection
James Bowen	MA Clean Energy Center
Robert McCarthy	Salem City Council, Ward 1
Lamont Beaudette, Malia Griffin, James Smith	Dominion Energy at Salem Harbor Station
Cynthia Carr	Historic Derby Street Neighborhood Association (HDSNA)
Fred Atkins	Harbor Plan Implementation Committee
Barbara Warren	Salem Sound Coastwatch
Patricia Gozemba, Marjorie Kelly, Jeffrey Barz-Snell	Salem Alliance for the Environment (SAFE)
William Luster	North Shore Alliance for Economic Development

In addition to the stakeholder group, the Jacobs study process included two public meetings in June and October 2011 to solicit feedback from residents and organizations from Salem and neighboring communities, as well as a June 2011 presentation to the Historic Derby Street Neighborhood Association (HDSNA), which represents one of the neighborhoods directly abutting the power plant. During the June 2011 public meeting the Jacobs consultant team distributed a brief questionnaire asking attendees to rank their priorities for redevelopment and their preferred land uses. Site remediation emerged as a top redevelopment priority, while generating significant municipal tax revenue and providing waterfront access for the public were identified as medium priorities. Expanding the port, renewable energy development and creating marine facilities were selected as high priority land uses, and natural gas power generation, maximizing market value and residential development were identified as low priorities (Jacobs et al 2012).

The Jacobs study noted that mixed-use development scenarios like the one proposed in the 2008 Brattle Group report would not be allowed under current regulatory restrictions at the Salem Harbor site. Salem Harbor is one of 11 Designated Port Areas (DPAs) in Massachusetts under the Office of Coastal Zone Management, meaning that there is a legal obligation at such sites to promote marine industrial uses and to prevent other types of development (such as residential) that would conflict with such uses. While there is a process for modifying DPA requirements that ultimately requires approval from the Secretary of Energy and Environmental Affairs, the City of Salem and the stakeholders group agreed that any proposed redevelopment should be consistent with the existing DPA regulations. Not altering these regulations was seen as a means by which the city, which does not own the power plant site, could maintain some leverage over developers, as local

officials could potentially offer regulatory relief if a proposed development was to their liking (Jacobs et al 2012).

Given these regulatory constraints and the preferences community members expressed in the June 2011 questionnaire, the Jacobs team decided to focus on marine industry, alternative energy, marine-dependent research and supporting commercial activities as land use priorities for potential redevelopment scenarios (Jacobs et al 2012). The study also articulated several key redevelopment goals, including complying with the regulatory environment, replacing as much tax revenue as possible, providing public waterfront access, and providing a mix of market-driven uses (Jacobs et al 2012). Elected officials saw the study as a tool they could use to market the Salem Harbor site to potential developers (Keenan 2013); as the study process concluded, the emergence of one particular developer would significantly reshape the dialogue around coal transition in Salem and in Massachusetts more broadly.

Shifting to Natural Gas?

The final Jacobs study, published in January 2012, noted that “there may be dialogue between Dominion and parties who may be interested in developing a gas fired power generating facility on the Salem Harbor property” (p. 102). The following month Dominion announced that they were in negotiations to sell the Salem Harbor site to Footprint Power, a New Jersey-based company seeking to build a new 630 MW gas plant there. Footprint’s stated corporate goal was to help revitalize old oil and coal plant sites (Footprint Power 2012), and their \$800 million proposal in Salem marked their very first project.

Footprint was not new to Salem, however; company representatives had visited the community as early as February 2010 to start meeting with local organizations and elected officials and had attended the 2011 public meetings during the Jacobs study process. Nonetheless, their proposal elicited and continues to elicit controversy. While the Jacobs study stated that “the consultant team has no bias towards any of the potential uses outlined” (p. 11), Rep. Ehrlich argued that the study in some ways appeared to make the case for a gas plant (Ehrlich 2013). The Jacobs study also noted that “in many of the scenarios that were analyzed, the economics do not appear to justify the development of a new power plant” (p. 72), leading other parties to question why a gas plant was now moving forward (Schlichtmann 2012, Haley 2013). In March 2012 Clean Water Action, HealthLink and SAFE released a joint statement expressing “deep concerns” about Footprint’s plans and suggesting that the proposed gas plant might not even be necessary, given that Salem Harbor had received permission to shut down from ISO-New England (Rice 2012). By July 2012, however, SAFE had shifted its position to support the proposed gas plant, putting them in alignment with city leaders who saw Footprint’s proposal as a means to ensure timely redevelopment of the Salem Harbor site while maintaining the municipal tax base (Dalton 2012). HealthLink, on the other hand, has maintained its opposition to the gas plant, putting them on the opposite side of the issue as their longtime collaborators.

In addition to specific objections to Footprint’s proposal, some saw the push for a gas plant as emblematic of a broader lack of planning vision. “Our region can finally engage in a creative process that frees us to imagine something other than fossil-fuel burning on [the Salem Harbor] site,” Rep. Ehrlich wrote in another newspaper column on May 14,

2012. “Unfortunately, Dominion seems to be obsessively focused on repeating history as it forges ahead with a proposal by Footprint to build a diesel-and-gas-fired power plant of near equal output to the old plant” (Ehrlich 2012). Rep. Ehrlich’s commentary inspired Beverly-based lawyer Jan Schlichtmann, who famously prosecuted W.R. Grace in Woburn in the 1980’s for groundwater contamination (the story was later documented in the book and movie *A Civil Action*), to come forward in June 2012 with his own development proposal for the site: an innovative marine biotech research facility (K. Olson 2012). Schlichtmann suggested that such a use could coexist with a gas plant if need be, but after meeting with Salem officials he alleged that Footprint was “hostile” to the idea of advancing a comprehensive development plan for Salem Harbor (K. Olson 2012). Like Rep. Ehrlich, he urged local officials to imagine alternative uses for the site beyond fossil fuel power generation (Schlichtmann 2012). Both Rep. Ehrlich and Schlichtmann also called for more robust public visioning and discussion, arguing that conversation about the future of Salem Harbor had been lacking since the release of the Jacobs study earlier that year and the subsequent news that Dominion and Footprint were in conversation (Ehrlich 2012, Schlichtmann 2012).

Engaging State Regulatory Processes

At the same time Schlichtmann sought to gain support for his redevelopment vision at Salem Harbor, state legislators were also attempting to advance their own desired site reuses. In a clear attempt to bolster Footprint’s gas plant proposal, in July 2012 Rep. Keenan succeeded in inserting a provision (Section 42) into a House clean energy bill that would have required utilities to enter into 15-year long-term contracts to purchase

electricity from new power plants built on the sites of old coal and oil power plants (Roman 2012). Keenan’s maneuver generated a broad public outcry that featured atypical alliances between environmental, business and power plant interests, who slammed Section 42 as a “sweetheart deal” for Footprint and expressed significant concerns that the proposal would raise rates for consumers and was anti-competitive in a deregulated energy market context (Roman 2012, Sturm 2012). Even SAFE, who had previously expressed their support for Footprint’s proposal more broadly, opposed Section 42 for these reasons (SAFE 2012).

Public pressure from this broad range of stakeholders led to the removal of the original version of Section 42 from the final version of the energy bill, as well as its replacement with a new compromise provision creating a state-level task force to examine the revitalization of Salem Harbor and other potentially retiring coal plants in Massachusetts (Roman 2012). Following the August 2012 passage of the final bill, “An Act Relative to Competitively Priced Electricity in the Commonwealth,” both Rep. Keenan and Mayor Driscoll were appointed to the eleven-member task force, which convened for the first time the following month and has held periodic meetings since. The question of long-term contracts was addressed in a separate section of the final legislation that required the Department of Public Utilities (DPU) to determine by March 15, 2013 whether additional generating capacity was needed in the Northeast Massachusetts zone and if so, whether long-term contracts would be an appropriate way to secure this capacity.

Within weeks of the passage of the clean energy bill Dominion sold the Salem Harbor site to Footprint, who then filed their gas plant proposal before the state Energy Facilities Siting Board (EFSB). In their petition Footprint noted that they had considered

other coal plant sites in Massachusetts (Montaup and Brayton Point in Somerset, as well as Mt. Tom in Holyoke) and that one of the determining factors in their decision to pursue a project in Salem was the strong support from the mayor, local officials and state representatives and senators for continued electricity generation at the site (Footprint Power 2012). In September 2012 the EFSB held a public hearing in Salem regarding the gas plant, providing local officials, organizations and residents with the opportunity to comment. The range of parties testifying at the hearing is summarized in Table 2.2. Following the hearing eight stakeholders (including six organizations and officials who had testified at the hearing, indicated below in Table 2.2, as well as Salem State University and the utility National Grid) submitted petitions to act as intervenors around Footprint’s proposal in forthcoming legal proceedings before the EFSB in early 2013. A ruling from the EFSB is pending as of this writing, and Footprint will have to enter into additional state and local review processes before the Department of Environmental Protection, the Salem Conservation Commission and the Salem Zoning Board of Appeals before their project can come to fruition (Dalton 2013).

Table 2.2: Organizations and Officials Testifying at 9/19/12 EFSB Hearing

Supporting or Expressing Positive Comments About Footprint’s Proposal	Opposing or Raising Concerns About Footprint’s Proposal
Salem Planning Director Lynn Duncan (on behalf of Mayor Kim Driscoll ^{a, b, d})	Jane Bright, HealthLink ^c
Representative John Keenan ^{a, b}	Linda Haley, Historic Derby Street Neighborhood Association (HDSNA) ^{a, d}
Robert McCarthy, Ward 1 Councilor ^a	Joel Wool, Clean Water Action ^c
Joan Lovely, City Council Chair	Sue Reid, Conservation Law Foundation (CLF) ^{c, d}

Patricia Zaido, Salem Partnership	
James Simpson, IBEW Local 326 ^{b, d}	
Robert Bradford, North Shore Chamber of Commerce	
Mickey Northcutt, North Shore Community Development Coalition ^d	
Pat Gozemba, Salem Alliance for the Environment (SAFE) ^{a, c, d}	

a – member of Jacobs study stakeholder group

b – member of state task force on power plant revitalization

c – member of Coal Free Massachusetts coalition

d – accepted as intervenor before the EFSB

As the EFSB process unfolded, the DPU docket on long-term contracts provided another venue for stakeholders to engage issues of state policy related to Footprint’s proposal. As the March 15, 2013 deadline for the DPU to make a decision approached, the battle lines that had been drawn over Section 42 the previous summer emerged once again, with environmentalists, incumbent power generators and utilities expressing opposition to long-term contracts and Salem officials expressing support (Chesto 2013). The DPU ultimately determined that there was a need for additional generating capacity in the Northeast Massachusetts region, while also ruling that long-term contracts were not necessary to secure this capacity. This turn of events was reported as a blow to Footprint’s efforts to secure project financing (Chesto 2013), although the developers are continuing to pursue the gas plant as of this writing, citing the DPU’s stated need for new generating capacity (K. Olson 2013). Environmental voices, on the other hand, countered that the

need for new capacity exists only in the short term and can be provided via transmission upgrades rather than the construction of a new power plant (Clean Water Action 2012).

Continuing Local Engagement

As state regulatory processes move forward, stakeholders and residents in Salem are remaining engaged on a local level as well. In February 2013 Footprint made their first public presentation in Salem about their power plant proposal and noted that they had incorporated several ideas from the Jacobs study into their project design (Furniss 2013). That same month Mayor Driscoll decided to reconvene most of the stakeholders who were involved in the Jacobs study process to form an advisory board on the redevelopment of Salem Harbor. New voices at the table included Senator Joan Lovely (who had previously served as Salem City Council Chair and had just been elected to the Senate the previous fall to replace the retiring Fred Berry), Patricia Zaido of Salem Partnership and Mickey Northcutt of North Shore Community Development Coalition (who had both testified at the September 2012 EFSB hearing in Salem), and Patricia Meservey, President of Salem State University President (which had filed to intervene in the EFSB proceedings). Dominion, the North Shore Alliance for Economic Development, Congressman John Tierney's office and the state agencies that had participated in the Jacobs study were not represented as part of the new group. Salem officials and planning staff characterized the new stakeholders group as directly addressing the new reality at Salem Harbor, whereas the Jacobs study had initially been seen as more of a theoretical exercise (Driscoll 2013, Taormina 2013).

The advisory board in the near term is intended to help Salem officials assess the potential impacts of Footprint's proposal, but it is not intended to be a new permitting

authority (Driscoll 2013). The group is working with consultants from Sasaki Associates (who were part of the Jacobs study) and AECOM Engineering to address a broad range of technical and planning concerns, including traffic, air quality, noise, land use and operations safety (AECOM 2013). Another issue falling into the group’s purview is the development of a potential community benefits agreement with Footprint. The broader redevelopment of the remainder of the Salem Harbor site beyond the proposed gas plant (which would only occupy 20 acres of the 65 acre site) is outside the board’s current scope (Driscoll 2013), though several participating stakeholders have expressed interest in developing a cruise ship terminal and creating a staging area to support offshore wind development. A related issue Sasaki has posed to the group is whether Salem should reconsider the current regulatory boundaries of the DPA – a strategy that was rejected in the Jacobs study. Mayor Driscoll (2013) has noted that the advisory board needs to be conscious of how the gas plant would affect the rest of the site, citing the need to avoid unintended consequences, and has expressed hope that the group can reach consensus.

In addition to convening a new stakeholders group, the City of Salem recently provided an opportunity for the broader public to comment via a local Planning Board hearing on May 2, 2013 (Dalton 2013). This marked the beginning of Salem’s local review of Footprint’s proposal, which will also involve processes before the Conservation Commission and the Zoning Board of Appeals. At the Planning Board hearing several residents expressed concerns about safety and noise and asked questions about what might happen at the rest of the Salem Harbor site (Dalton 2013). It remains to be seen how the Planning Board review process might impact the deliberations of the Mayor’s stakeholders group.

Discussion

The case of Salem highlights the multifaceted nature of citizen and stakeholder engagement around coal transition planning. From activist campaigns for power plant cleanup and shutdown, to the advancement of grassroots visions for redevelopment, to the assembly of stakeholders to investigate reuse options, to the creation of the state-level power plant revitalization task force, to participation in regulatory processes at the EFSB and the DPU, the public conversation around the future of Salem Harbor has played out in a variety of venues and continues as of this writing. The formation of the state task force is particularly significant, as it reflects how the impending retirement of Salem Harbor Station has elevated broader issues of coal transition at a state policy level. The task force has a legislative mandate to present analyses of Salem Harbor by June 2013 and of other coal-fired generating facilities in Massachusetts beyond Salem by the end of 2013. Chapter 5 addresses how the task force is working towards this objective in coordination with local communities and statewide environmental advocates.

With respect to Carlson's (1999) convening methodology of assessing the situation, identifying and engaging participants, locating the necessary resources to support the process, and planning and organizing the process, the City of Salem has taken a leadership role by recognizing the uncertain future of Salem Harbor Station, assembling groups of stakeholders to guide the Jacobs study and address issues related to Footprint's proposal securing funding for the Jacobs reuse study, and holding two public hearings. It is also noteworthy that both stakeholder bodies the city convened comprise a broad range of interests, including elected officials as well as local environmental, neighborhood,

community development and economic development organizations. However, despite these positive efforts, it is unclear whether future public processes will produce the consensus that Mayor Driscoll seeks. In contrast to other stakeholders in Salem, Linda Haley of HDSNA continues to express objections to the idea of a gas plant (Haley 2013). She has also noted that the Point Neighborhood Association (which represents environmental justice populations in the vicinity of the power plant) is not part of the power plant advisory board (Haley 2013), highlighting the contested nature of stakeholder representation in Salem. The role of stakeholder representatives versus the larger public has also emerged as a point of contention, as members of the Coal Free Massachusetts coalition have characterized the process in Salem as lacking opportunities for residents to comment beyond the two public hearings held during the development of the Jacobs study (Cleveland 2013). Even more broadly, neither the Jacobs study committee nor the more recently assembled advisory board included any stakeholders from outside Salem, many of whom are opposed to the gas plant proposal and have been instrumental in driving the broader conversation around shutting down the Salem Harbor plant. This raises fundamental questions about how those who do not stand to benefit from Salem's tax revenues but still have a stake in the power plant site's future can and should engage local planning processes that have a region-wide impact.

The debate over Footprint's proposal also raises questions about the appropriate role of local officials in planning for coal transition. Elected leaders in Salem have arguably decided to take a pragmatic approach, seeing the gas plant as the most viable means to replace the tax revenue from Salem Harbor Station given the current regulatory constraints at the site. They have repeatedly expressed concerns that the site will remain a blighted,

padlocked eyesore in the absence of redevelopment action, and lacking ownership of the Salem Harbor site and seeing the EFSB process moving quickly, they are less interested in engaging with the question of whether or not a gas plant should move forward and more interested in how they can achieve the best outcome possible for Salem through a process that is already underway (Driscoll 2013, Taormina 2013). The extent to which this apparent pragmatism has compromised opportunities for broader visioning remains a point of debate. As described earlier Footprint's interest in Salem Harbor was announced right after the Jacobs study was released, and there were no follow-up public forums to discuss the study results. Whether such forums could have created more comprehensive proposals for redevelopment that reflected a community consensus at this point is pure conjecture, but at the very least they arguably could have provided a valuable opportunity for public comment and feedback.

The approach taken by Salem officials also raises questions about other ways in which city officials might exercise their authority with respect to coal plant redevelopment. As described earlier the Jacobs study recommended against changing the regulatory restrictions imposed by Salem's DPA, which effectively rules out redevelopment scenarios like the one proposed by the Brattle Group. In contrast to this the nearby city of Gloucester is actively seeking to change its DPA boundaries, and Sasaki Associates in March 2013 suggested that Salem might consider doing the same. The question of whether Salem officials could or should have considered changing the DPA boundaries to advance a particular redevelopment vision beyond marine industrial uses raises broader issues about what steps city officials should take to proactively shape redevelopment at coal plant sites, as opposed to reacting to and working within the framework of a particular developer's

proposal. Haley of HDSNA has expressed her hope that “people will be convinced that they have more control over what goes [in Salem Harbor] than they have believed,” noting that elected officials in the city of Brockton – which has been facing a gas plant proposal since 2007 – have decided to pursue a path of active opposition, in contrast to Salem officials’ support for Footprint (Haley 2013). Others like Rep. Ehrlich have argued that Salem should not have been so hasty to accept the first redevelopment proposal that was presented, given that the city’s tax shortfalls are going to be covered by the state for the next several years (Dalton 2012).

Salem officials deserve great credit for proactively pursuing a reuse study and working with local stakeholders to develop it. However challenges remain with respect to who has been represented in the city’s efforts, and public discussion of the Jacobs study’s worthwhile findings have largely been sidelined since Footprint announced their plans. Whether or not the gas plant will actually get built remains an open question, given issues related to project financing and the need for several layers of regulatory approval. Regardless of the fate of Footprint’s proposal, it remains to be seen how the city will build off the ideas in the Jacobs study to advance a redevelopment vision for the rest of the Salem Harbor site.

Chapter 3: Somerset

Before Salem Harbor Station's retirement was announced or the State of Massachusetts created a coal plant revitalization task force, the Town of Somerset, which historically hosted not one but two coal plants, was already directly confronting the challenges of coal transition. While Salem Harbor Station is not set to fully shut down until June 2014, Somerset's 174 MW Montaup Station has laid dormant since January 2010. A group of local residents has created a mixed-use redevelopment vision for that power plant site to spark community conversation about reuse possibilities. However these same residents have been frustrated by a perceived lack of responsiveness to their concerns from municipal officials. At the same time the ultimate fate of Somerset's 1,580 MW Brayton Point Station, the largest fossil fuel-burning facility in New England, remains an open question and a source of controversy. The case of Somerset therefore highlights ongoing obstacles to planning for specific coal plant site reuse and to envisioning a coal-free future more broadly.

Montaup Station: From Cleanup to Shutdown

As part of broader efforts to enact strict pollution standards for Massachusetts' Filthy Five power plants, the late 1990's saw the emergence of a grassroots Campaign to Clean Up Brayton Point that brought together local activists from across the South Coast region and statewide environmental groups like Clean Water Action (D. Olson 2000). The campaign ultimately succeeded in winning new power plant regulations; in response NRG Energy, the owner of Montaup Station, made a commitment in 2003 to either clean up the plant or shut it down by 2010. At the time advocates largely assumed that cleaning up the

plant meant repowering it with natural gas (Dion 2008). However NRG's efforts to instead implement a previously untested power generation technology at the power plant site would ultimately lead to the plant's demise and start a conversation about potential reuse alternatives.

In 2007 NRG announced a plan to adopt experimental coal gasification technology at Montaup Station, arguing that this process would reduce air pollutants like nitrogen oxide and sulfur dioxide (Dion 2009). Local and statewide environmental advocates countered that NRG's proposal would enable prolonged coal burning at an already aging plant without reducing greenhouse gas emissions; in addition, they expressed concerns that NRG's plan to also seek a permit to burn biomass (including construction and demolition debris) would lead to an increase in toxic air pollution (CLF 2007). In effect advocates saw NRG's coal gasification plan as an abandonment of their earlier promise to clean up or shut down (Dion 2009). Despite these objections, the Massachusetts Department of Environmental Protection (DEP) in January 2008 approved the coal gasification proposal without requiring a full environmental review.

NRG's proposal galvanized the formation of the Coalition for Clean Air South Coast, a new grassroots organization that featured a core of local activists from Somerset and allies from surrounding communities, some of whom had been actively involved with the original Filthy Five and Brayton Point efforts years earlier. The group launched a campaign rejecting coal gasification and calling upon NRG to adhere to its original promise to clean up or shut down, and several group members filed suit in coordination with the Conservation Law Foundation (CLF) in state court to overturn NRG's permits. In light of

the pending legal challenge, NRG announced in November 2009 that they would shut down Montaup Station on January 2, 2010 per their original commitment (CLF 2009). This temporary victory for environmental advocates became permanent in February 2011 when NRG asked the DEP to withdraw its earlier approval for their coal gasification plans. With the retirement of the 85-year-old Montaup Station finally assured, the Coalition for Clean Air shifted its focus to ensuring the sustainable reuse of the 39 acre power plant site.

Appointing a Reuse Committee and New Visions for Redevelopment

Even before NRG announced the shutdown of Montaup Station in November 2009, the Coalition for Clean Air had already begun touting a vision for mixed-use development from group member and city planner Al Lima as a potential alternative to continued power generation at the site. Lima argued that a proposal like his, which included retail development, affordable housing and enhanced public space along the Taunton River waterfront, would generate over \$2 million in tax revenue for Somerset while creating 600 jobs – both significant increases over the \$582,000 NRG paid in taxes in 2009 and the 50 people the company employed at the site (Austin 2009). Lima (2013) also stated that he intended for his plan to inspire the Somerset community to start thinking about reuse possibilities and planning for what they really want. After Montaup Station permanently retired in February 2011 the Coalition for Clean Air moved to explore these issues more rigorously by submitting four reuse articles to Somerset Town Meeting, including one to change the power plant site’s zoning from industrial to business and another to set up a formal reuse committee.

While Town Meeting did not vote to change the zoning (which required a two-thirds vote), the majority of the body supported the reuse committee article in May 2011. The Somerset Board of Selectmen appointed the committee the following month, giving it a mandate to submit a final report to Town Meeting the following spring (Welker 2011). The members of the reuse committee are summarized in Table 3.1. Six Somerset residents, including Pauline Rodrigues of the Coalition for Clean Air, applied to join the group, but they were all turned down except for attorney Catherine Sullivan. The lack of advocacy representation on the committee marked a strong disappointment for the coalition (Austin 2012), and their frustration would continue over the next year. Even as NRG entered into conversations with potential purchasers of the Montaup site during the fall of 2011, the committee to date had failed to seek grants or town funds to create a reuse study similar to what Salem was pursuing at the time, despite receiving authorization to do so from Town Meeting (Welker 2011).

Table 3.1: Members of the Somerset Reuse Committee

Name	Affiliation
Stu Mahjoory (chair)	Somerset Board of Selectmen
Timothy Turner	Somerset Planning Board and Conservation Commission
James O'Rourke	Somerset Zoning Board of Appeals
Roger Benevides	Somerset Economic Development Committee
Catherine Sullivan	Somerset resident and attorney

In February 2012 NRG sold the Montaup site to New Jersey-based Asset Recovery Group (ARG) for \$3.65 million, and ARG shortly thereafter applied for permits to begin demolition work to prepare the site for redevelopment. ARG and Somerset Selectman and reuse committee chair Stu Mahjoory expressed broad interest in the concept of mixed-use development and stated that power generation was not a desirable reuse of Montaup Station (Austin 2012, Mahjoory 2013), but neither party advanced a specific redevelopment vision for the power plant site. Grassroots frustration over this lack of action came to a head in May 2012. The Coalition for Clean Air held a press conference outside Town Meeting with Toxics Action Center and Clean Water Action, unveiling a report card giving the Board of Selectmen, ARG and the reuse committee failing grades for a lack of leadership and transparency over the previous year (Austin 2012, Clean Water Action 2012). Specific criticisms included the absence of open processes for public engagement and comment and the committee's failure to secure resources to support reuse planning, and the coalition and its allies called upon municipal leaders to extend the committee for another year to fulfill its goals (Clean Water Action 2012).

Although the reuse committee was never extended and did not produce a final written report as per its original charge, a new development vision would still capture the attention of the Somerset community during the summer of 2012. Beverly-based attorney Jan Schlichtmann had previously sought to advance a marine biotech research facility at the site of the retiring Salem Harbor Station; with help from Mahjoory, he had secured a meeting in June with ARG and Salem officials to discuss the idea (Schlichtmann 2012). Finding Salem leaders to be cool to his proposal, he approached ARG and Mahjoory about potentially doing the project at Montaup Station and found a much warmer reception

(Austin 2012). In addition to marine commercial and research facilities, Schlichtmann's proposal for the site featured many aspects of mixed-use development, including expanded waterfront access, a harborwalk and promenade, a hotel and an assisted living facility (Austin 2012). Rodrigues hosted a public meeting in July to help introduce these plans to the community, and follow-up meetings took place in September and November. All the while Schlichtmann worked to secure support from residents and town officials and partnerships with Roger Williams University and the New England Aquarium, and he even entered into an agreement with ARG that gave him six to nine months to meet key design benchmarks for the proposed \$100 million project (Goode 2012).

By December 2012, however, the prospects for the project appeared less certain. Just as the Coalition for Clean Air had previously attempted to change the zoning of the Montaup site, Schlichtmann called for a special Town Meeting to change portions of the property to commercial and residential designations, arguing that this was necessary for the project developers to secure state funding (Austin 2012). However members of the Board of Selectmen expressed their opposition to the zoning change and stated that the issue would not be considered at the special Town Meeting in February 2013 (Austin 2012, 2013). Schlichtmann also was ultimately unable to come to an agreement with ARG to purchase the property (Austin 2013); he subsequently shifted his project development efforts to Gloucester.

Uncertainty Around Brayton Point

In addition to attempting to determine redevelopment possibilities at the shuttered Montaup Station, Somerset residents are also contending with the future of the massive

Brayton Point Station, which has been in operation since 1963. As described earlier, activist campaigns in the late 1990's had focused on enacting strong regulations to clean up this Filthy Five facility, and since 2005 the plant owner Dominion Energy has spent over \$1 billion on pollution control upgrades as part of the largest settlement in the history of the Clean Air Act (CLF 2013). Despite these investments, the plant remains dogged by environmental concerns. Brayton Point has recently been described as “the biggest toxics polluter for all of New England” (Toxics Action Center 2012, p. 12), and in December 2012 CLF, Toxics Action Center and Clean Water Action filed a notice of intent to sue Dominion for ongoing Clean Air Act violations at the plant. With the July 2012 launch of the statewide Coal Free Massachusetts coalition and the continued campaign efforts of the local Coalition for Clean Air, the broader conversation around the future of Brayton Point has started to shift from focusing on cleaning up the plant to moving beyond coal entirely (Coal Free Massachusetts 2012).

There has been a great deal of speculation about the future of Brayton Point. Citing a desire to exit deregulated energy markets, Dominion announced that it was putting the plant on the market for sale in September 2012 (Lindsay 2012); several analysts have argued that increased cost pressure from natural gas played a strong role in Dominion's decision (Chesto 2012, Lindsay 2012). Members of the Coalition for Clean Air and Coal Free Massachusetts argued that this turn of events clearly indicated that coal was on its way out in Massachusetts and called for clean redevelopment at Brayton Point in response (Chesto 2012, Wittenberg 2012). In the wake of the sale announcement the long-term financial viability of the power plant emerged as a point of contention. A February 2013 analysis commissioned by CLF concluded that “the future for Brayton Point looks bleak

whether Dominion continues to own the plant or another owner steps forward to buy the plant” (Schlissel and Sanzillo 2013). The same report noted that the plant’s operating capacity decreased from 84 percent in 2007 to just over 16 percent through the first 11 months of 2012, and that the plant’s earnings before interest, taxes, depreciation and amortization decreased from \$345 million in 2009 to \$24 million in 2012 (Schlissel and Sanzillo 2013). Mahjoory disagreed with the conclusions of the study, characterizing it as “opinionated” (Mahjoory 2013). He and Somerset State Representative Patricia Haddad have both expressed their hopes that Brayton Point remain open and continue to pay taxes (Mahjoory 2013, Haddad 2013).

In March 2013 Dominion announced that they were selling Brayton Point to a subsidiary of the private equity firm Energy Capital Partners as part of a \$650 million package including two other power plants in Illinois. A report from financial firm UBS estimated Brayton Point’s overall value as part of the deal at \$54 million – a far cry from the \$1.2 billion Dominion had spent in 2005 just to upgrade pollution control equipment (Cusick 2013). CLF argued that Dominion was effectively giving the plant away for its value as scrap to get it off its balance sheet (Cusick 2013), whereas Mahjoory suggested that the very fact of the sale indicated that there was continued economic viability at Brayton Point (Mahjoory 2013). The sale is expected to close in the second quarter of 2013, and the long-term intentions of the new plant owner remain unclear. (Energy Capital Partners and Somerset officials have both mentioned the possibility of natural gas conversion at Brayton Point [Goode 2013, Mahjoory 2013], and one of the four generating units at the plant is already equipped to burn gas. However Footprint Power rejected Brayton Point as a potential site for a new gas plant, arguing that Dominion’s investments in pollution controls

“make [it] an unlikely candidate for near-term shutdown and redevelopment” [Footprint Power 2012, p. 58].)

Despite this uncertainty, the Coalition for Clean Air is moving forward with efforts to explore options for transitioning beyond coal at Brayton Point. Frustrated by local inaction and the lack of elected officials representing Somerset on the state’s coal plant revitalization task force, the group set up a meeting with state environmental secretary and task force chair Richard Sullivan in March 2013 to request assistance. They subsequently received a commitment that the task force would hold a meeting in Somerset (Goode 2013). The coalition also hosted its own public forum in Somerset in April 2013 to consider how residents can “maintain Somerset’s tax base, protect the health of the South Coast, and assure adequate financial protection for power plant workers” in light of the dramatic decreases in earnings at Brayton Point (Coalition for Clean Air 2013). At the event, which was attended by over 70 residents from Somerset and the broader South Coast region, the group invited attendees to join a new citizen transition committee – this one unaffiliated with the Town of Somerset – to explore possibilities for the future of the power plant. As of this writing the committee’s first meeting was scheduled for May 23, 2013. Secretary Sullivan has also offered Somerset resources for its own reuse study (Haddad 2013), and it is currently unclear how that potential effort might line up with the Coalition for Clean Air’s plans.

Discussion

Local advocates in Somerset have faced persistent challenges in working with their elected officials around issues of coal transition. In contrast to Salem, where municipal

leaders proactively secured funds for a reuse study and assembled an affiliated stakeholders group before Salem Harbor's retirement was even announced, the Town of Somerset did not move forward with investigating redevelopment options or creating a reuse committee until after Montaup Station was shut down. Even then the ultimate impetus for pursuing the reuse committee came not from the Town, but from the Coalition for Clean Air, who took their case to Town Meeting. According to Lima, "[The Selectmen] were annoyed that Town Meeting basically directed them to [set up the committee], because we couldn't get them to do it by asking them" (Lima 2013). The final committee excluded the very activists who had pushed for its creation, and rather than reflecting a broad cross-section of community stakeholders it was primarily comprised of members of town boards, leading to political frustration and raising concerns about process and representation. Lima again: "The Selectmen chose people who would do their bidding, essentially. They didn't want the committee to do anything."

As mentioned earlier, the Coalition for Clean Air has expressed severe criticism of the reuse committee's failures to create a clear process for public engagement and follow through on its broader mandate. Their decisions to form a new citizen transition committee that does not include the Town of Somerset and to seek support from the state's coal plant revitalization task force reflect their deep frustration. The fraught dynamic between local advocates and officials reflects Somerset's broader fiscal challenges and contrasting perceptions over the future of coal. Brayton Point paid Somerset \$15.9 million in taxes in fiscal year 2012, representing a whopping 40 percent of the town's tax base (Welker 2012); however, as Brayton Point's valuation decreased from \$660 million in 2012 to \$397 million in 2013, the plant's tax payments decreased by almost \$8 million (Austin

2013). In response to this situation, Rep. Haddad filed an amendment to the 2013 state budget that would offset any losses in revenue for municipalities hosting coal-fired power plants operating under 50 percent capacity (Austin 2013). This proposal stands in contrast to the 2011 budget amendment compensating Salem for tax shortfalls, which was only passed after the retirement of Salem Harbor Station was already assured. The Coalition for Clean Air criticized Rep. Haddad’s amendment as a “bail out [for] a private corporation” (Rodrigues, Brodeur and Mello 2013), and one representative from Coal Free Massachusetts has argued that Somerset “cannot depend on outdated, uneconomic coal plants for the future of its tax base” (Cleveland 2013). While Somerset officials suggest that Brayton Point will be viable in the future (Mahjoory 2013, Haddad 2013), members of the Coalition for Clean Air contend that these same officials are in denial over the loss of Montaup Station and have not accepted that the town will lose Brayton Point (Rodrigues 2013).

These divergent perspectives have largely prevented collective action from advocates and politicians to address the future of coal in Somerset. Differing opinions over the extent to which local officials should be proactive in planning for coal transition have also emerged as a point of contention. As mentioned earlier, both the Coalition for Clean Air and Jan Schlichtmann sought to change the zoning at the Montaup Station site, only to be rejected by Town Meeting and the Board of Selectmen. In May 2011 the Selectmen were reportedly concerned about preempting NRG by rezoning before they had sold the Montaup property (Lima 2013); more recently, Mahjoory and Rep. Haddad have both stated that they prefer to take a wait-and-see approach to rezoning, citing a lack of clarity about redevelopment goals, the potential for zoning changes to be misaligned with

developers' needs and a desire to see what happens once ARG has finished cleaning up the site (Mahjoory 2013, Haddad 2013). On the other hand, Lima (2013) has consistently highlighted the importance of having a clear vision for redevelopment, arguing that based upon his experience as a city planner, potential developers want to know what a town actually wants at a given site. For the time being, however, elected officials in Somerset appear reluctant to push any particular ideas or proposals for the reuse or rezoning of the Montaup or Brayton Point sites.

Many unknowns remain with respect to how the engagement of diverse stakeholders will impact the ultimate future of Brayton Point and present possibilities for collaboration. Key considerations include the potential support and resources the coal plant revitalization task force may bring to Somerset via a public forum and a reuse study, the eventual activities and impact of the new citizen transition committee, the outcome of environmentalists' potential lawsuit against the plant for Clean Air Act violations, and Equity Capital Partners' long-term plans as the new plant owners. A forthcoming reuse study in particular could present opportunities for different parties to pursue joint fact-finding and arrive at a common understanding of the challenges and opportunities around Brayton Point and potential pathways forward. It also remains to be seen what happens at Montaup Station once ARG is finished cleaning up the property in the next year or so. For the moment, however, deep-seated differences of opinion present an ongoing challenge to effective action around coal transition planning in Somerset.

Chapter 4: Holyoke

Like Salem Harbor, Montaup and Brayton Point Stations, the 136 MW Mt. Tom Station in Holyoke has been in the crosshairs of environmental activists since the Filthy Five campaign efforts of the late 1990's. Grassroots conversations about moving beyond coal at Mt. Tom began in earnest in 2010. More recently diminished employment and energy production at the plant, as well as owner GDF Suez's request for the plant to exit the regional energy market for a year in 2016-2017, have led to speculation that the plant may soon retire permanently. Community groups in Holyoke have been proactive in attempting to explore redevelopment options at the Mt. Tom site, but they have been hampered by a lack of resources and a clearly defined process for engaging with the city. As Holyoke's elected officials now seek to secure funds to conduct a reuse study similar to Salem's, the possibilities for the future of Mt. Tom may yet come into clearer focus.

Investigating Options While Pursuing Accountability

Since the early 2000's the national Sierra Club's Beyond Coal campaign, in coordination with local grassroots groups, has helped galvanize efforts to block the construction of dozens of new coal-fired power plants and in recent years has increasingly focused its energy on retiring existing plants as well (Hertsgaard 2012). In the summer of 2010 the Club's Massachusetts chapter joined the national effort with a particular focus on Mt. Tom, and that November Amherst-based volunteer Peter Vickery and Club organizer Drew Grande began working to convene a diverse coalition "to transform [Mt. Tom] from a source of climate-changing pollution to a source of clean energy and green jobs" (Vickery 2010). The group launched in February 2011 under the name GreenWork and would

eventually come to comprise a broad range of organizations and concerned individuals under the new name Action for a Healthy Holyoke (AHH). The organizational members of AHH are summarized below in Table 4.1.

Table 4.1: Organizational Members of Action for a Healthy Holyoke (AHH)

Organization	Sector
Arise for Social Justice	Community
Holyoke Food and Fitness Policy Council	Community
Neighbor to Neighbor	Community
Nuestras Raices	Community
Conservation Law Foundation	Environmental
Sierra Club	Environmental
Toxics Action Center	Environmental
Holyoke Municipal Employees of SEIU 888	Labor
Region 1, Massachusetts Nurses Association	Labor
UAW 2322	Labor
Western Massachusetts Jobs with Justice	Labor

GreenWork’s initial focus was on exploring ways to keep Mt. Tom open in a more environmentally friendly manner, including potentially burning natural gas (Rodriguez 2011). By the fall of 2011, however, the rebranded AHH had shifted its focus to investigating redevelopment options at the plant more broadly. Inspired by Somerset residents’ efforts earlier that year to set up a reuse committee around the future of the Montaup Station site, AHH approached the Holyoke City Council about creating a similar

body focused on Mt. Tom. On October 19, 2011 the council, noting the low percentage of time the power plant was online and media reports the previous week that GDF Suez planned to lay off half of the plant’s 60 person workforce, unanimously passed a resolution “[requesting] the establishment of a diverse community advisory group (CAG) to the city to research and develop a plan for the reuse of the Mt. Tom coal plant site” (Jourdain, Lisi and Vega 2011). The resolution further called for at least one resident of each of Holyoke’s seven wards to be appointed to the CAG and outlined goals of “pursuing funding for a professional reuse study, engaging residents of Holyoke in bi-monthly public hearings on visioning and progress, and exploring possibilities and proposing sustainable alternatives for the site” (Jourdain, Lisi and Vega 2011). The CAG was officially formed in April 2012 and has been exploring issues of site reuse and cleanup, as well as retraining and transitioning plant workers; its members (including several people affiliated with AHH) are summarized below in Table 4.2. While the establishment of the CAG was seen as a milestone in AHH’s campaign to retire Mt. Tom, the CAG has encountered numerous challenges in pursuing its stated objectives, which will be discussed more at length later.

Table 4.2: Members of Holyoke’s Community Advisory Group (CAG)

Name	Affiliations
Jen Berman (Chair)	UMass-Amherst Master’s in Public Policy program
Liz Budd	Holyoke Food and Fitness Policy Council/AHH
Carmen Concepcion	Neighbor to Neighbor/AHH
Adrian Dahlin (Vice Chair)	Holyoke Conservation Commission

Pat Duffy	Holyoke Planning Commission
Danny Perez	Neighbor to Neighbor/AHH
Rick Purcell	AHH, Massachusetts Green-Rainbow Party
Tim Purington (former member)	Former Ward 4 City Councilor

At the same time that AHH is looking beyond coal at Mt. Tom, coalition members are also seeking to hold the plant accountable for its current pollution impacts. Youth asthma rates in Holyoke are more than double the state average of 10 percent, and many Puerto Rican immigrants to Holyoke have reported developing asthma after moving to the community and suffering significant health and financial burdens as a result (Grande 2013). Air quality modeling conducted for the Sierra Club has found that the broader Pioneer Valley region is out of compliance with National Ambient Air Quality Standards (NAAQS) for sulfur dioxide (a critical pollutant linked to asthma), and that if Mt. Tom is taken out of the equation the region falls into compliance with the NAAQS (Wingra Engineering 2012). Noting that Mt. Tom has been operating under an expired air permit since 2007, the Sierra Club has been working since 2011 to pressure Governor Patrick to renew the permit to reflect tougher pollution standards as part of a broader strategy “to shift the costs of coal burning from families around [the plant] back to [GDF Suez]” (Grande 2013). In December 2012 the Massachusetts Department of Environmental Protection accepted the Sierra Club’s modeling and announced that it was starting a new Clean Air Act Title V air permitting process, which will provide opportunities for public comment in 2013 as GDF Suez seeks to demonstrate that Mt. Tom is in compliance with EPA standards.

Whether the process will ultimately put additional economic pressure on the plant to retire remains to be seen.

Challenges with the CAG and Engaging the Task Force

As mentioned earlier, the creation of the CAG marked a victory for AHH, and CAG members and elected officials from Holyoke have expressed excitement that the group comprised residents from all seven wards of Holyoke and thus had the potential to bring diverse populations together to represent the entire city's interests (Dahlin 2013). Despite this promise, however, the CAG has faced a series of logistical and process challenges that have precluded it from achieving its goals around the potential reuse of Mt. Tom. Members of the CAG and AHH have argued that the CAG did not receive a clear direction or strong support from city leaders and that there were no clear channels for communication between the city and the CAG, creating a lack of accountability on both ends (Andresen 2013, Dahlin 2013). CAG Vice Chair Adrian Dahlin noted there was initial confusion and an unclear process between the mayor and the city council as to who should be appointed to the CAG, and that as a collection of volunteers the group lacked the political clout, capacity and expertise necessary to tackle such a large economic development problem (Dahlin 2013). Dahlin also described confusion about the CAG's role, as some city officials and GDF Suez initially saw the group as advocating for closing Mt. Tom because that was the position of AHH (who had originally pushed for the creation of the CAG); to avoid political challenges to their work, CAG members had to clarify that their actual objective was to prepare for the eventuality of a plant closure. Holyoke's planning and economic development director Marcos Marrero echoed many of the challenges Dahlin mentioned,

while also noting his own department's lack of capacity to plan around Mt. Tom without an infusion of additional resources (Marrero 2013).

In addition to facing challenges with respect to how they work with city leaders, members of the CAG have also had to grapple with questions of how they engage the broader public. Local residents have expressed a broad range of reuse ideas for the 80 acre Mt. Tom site along the Connecticut River, including renewable energy generation, agriculture, recreation, education and entertainment (Andresen 2013). However in the absence of a reuse study the CAG lacks information about concrete or feasible redevelopment options to present to the larger Holyoke community, and AHH sees little use in speculating about a broader redevelopment vision until these details are known (Andresen 2013). Due to the capacity constraints mentioned earlier the CAG was limited in its ability to seek funding for a study, and when the state's task force on coal plant revitalization was created the group actually stopped meeting for a time, seeing the new body as being better positioned to secure relevant financial resources (Dahlin 2013). State Senator Michael Knapik, who serves on the task force and represents Holyoke, has recently been working to secure up to \$50,000 in state money for a local reuse study, and Dahlin anticipates the CAG having an outreach role to play as that study is conducted and completed (Knapik 2013, Dahlin 2013).

The role of the state task force has raised broader issues around public engagement for advocates in Holyoke. In February 2013 AHH wrote a letter to Sen. Knapik expressing concerns about the lack of a seat for the general public on the task force and urged the Senator to "take strong measures to ensure the opportunity for public comment, input and

transparency,” including hosting a task force meeting in Holyoke and collaborating with the CAG (AHH 2013). Since then Sen. Knapik has stated that the task force intends to hold a forum in Holyoke (Knapik 2013). He and Marrero have also suggested that future processes for public participation in Holyoke will become clearer as a reuse study unfolds and there is a need to engage stakeholders accordingly (Knapik 2013, Marrero 2013).

In addition to state legislators, local officials in Holyoke are increasingly recognizing the need to investigate redevelopment options at Mt. Tom. In early March 2013 GDF Suez received approval from the regional grid operator ISO-New England for a dynamic de-list bid they had filed to remove Mt. Tom from the energy market for one year from 2016 to 2017. Shortly afterwards Holyoke Mayor Alex Morse wrote to task force chair Richard Sullivan expressing concerns over potential losses of jobs and \$615,000 in annual tax revenue from the plant and requesting state assistance in the event that Mt. Tom shuts down – including support for a reuse study similar to Salem’s (Plaisance 2013). AHH and the broader Coal Free Massachusetts coalition have argued that the de-list bid indicates that Mt. Tom could retire without threatening grid reliability, and that both Salem Harbor and Montaup Stations filed similar de-list bids before their permanent retirements were announced (Coal Free Massachusetts 2013). While GDF Suez has stated that they have no current plans to close Mt. Tom for good, Sen. Knapik has noted that company representatives have attended task force meetings and that “they see the writing on the wall” for the future of the plant (Knapik 2013).

Discussion

In contrast to the case of Somerset, where municipal officials have not acknowledged the possibility of Brayton Point's closure, elected officials from Holyoke have largely accepted that Mt. Tom may shut down and are now proactively seeking resources to help the city investigate potential transition options, as evidenced by the city council vote to create the CAG and the efforts of state legislators and the mayor to seek funds for a reuse study. These outcomes reflect the role of AHH in building political will to consider issues of coal plant redevelopment. However as discussed earlier, advocacy successes and recognition from elected officials that Mt. Tom might retire have not yet led to effective planning action. The CAG and the city have faced external challenges with respect to working with each other as well as internal challenges relating to their own lack of capacity and resources. Dahlin has suggested in retrospect that there should have been dedicated staff to manage the CAG's efforts; that the group should have been a truly multi-stakeholder effort involving city officials (including the offices of the mayor, the assessor, the treasurer and the planning department), the business community and plant workers; and that the group needed a clear timeline, goals and a problem-solving focus to guide its efforts (Dahlin 2013).

It remains to be seen whether such ideas will be incorporated into future public processes around Mt. Tom. The renewal of the plant's air permit, the eventual reuse study and the forthcoming coal plant revitalization task force forum in Holyoke will all provide opportunities for public engagement, and AHH and a reactivated and potentially reconfigured CAG arguably have a role to play in these venues. The air permitting process

provides a clear framework for advocates to push for strong pollution limits on Mt. Tom, but the parameters of the reuse study and the task force forum are less clear. The CAG could potentially help frame the study's goals and parameters, solicit community vision for and input on potential redevelopment options, present the study's conclusions to the broader public and invite additional feedback or some combination thereof; the task force forum could provide a timely opportunity to educate state policymakers and help the CAG and other interests in Holyoke secure additional resources to support local planning efforts. Whether the aforementioned processes will provide clear structures to achieve the potential objectives outlined above remains an open question.

That elected officials from Holyoke are willing to provide venues for public participation through the reuse study and the task force is commendable. However the specific details of these upcoming processes will have strong implications as to whether residents and advocates will be able to build effective partnerships with elected officials and have their concerns truly be heard and incorporated into future decisions around Mt. Tom. The challenges the CAG has faced to date provide a cautionary tale as diverse stakeholders move forward on issues around coal transition in Holyoke.

Chapter 5: Cross-Case Synthesis

The examples of Salem, Somerset and Holyoke all highlight a long history of grassroots engagement around coal-fired power plants and the important role of local community organizations in driving public conversations about coal transition. Campaign efforts by Stop the Plant Now and A Vision for Salem promoting alternative uses at Salem Harbor Station and calls from the Salem Alliance for the Environment (SAFE) for a reuse study served as precursors to the City of Salem’s ultimate pursuit of the Jacobs study; the Coalition for Clean Air in Somerset was instrumental in pushing their Town Meeting to authorize a reuse committee to explore redevelopment options at Montaup Station; and Action for a Healthy Holyoke (AHH) was successful in getting their City Council to pass a resolution calling for a Community Advisory Group (CAG) around Mt. Tom Station. Despite this common grassroots agenda-setting theme, however, the aforementioned communities have taken different approaches to considering broader issues of coal plant reuse. Four key areas of divergence across these municipalities include the level of engagement from government officials, the nature of stakeholder representation, the nature of public participation and the provision of adequate resources, which are described more at length below. As we shall see later these issues also apply to Massachusetts’ state-level task force on coal plant revitalization, as well as a coal task force in Chicago that provides important insights into how communities in Massachusetts might achieve broader consensus.

Engagement from government officials

Of the three coal communities in Massachusetts the City of Salem has been the most proactive in attempting to identify coal plant reuse options. This is evidenced by Mayor

Driscoll's successful attempt to secure funding for a reuse study before Salem Harbor Station's retirement was even announced, as well as her subsequent convening of stakeholder groups to advise the study process and now to provide guidance on Footprint's gas plant proposal. While these stakeholder processes have sometimes been controversial, the Mayor's level of engagement around the future of Salem Harbor is significant.

In Somerset, on the other hand, municipal officials have been reluctant to address community concerns around coal transition, and the Coalition for Clean Air had to go to Town Meeting to pressure their Board of Selectmen to create a reuse committee around Montaup Station. The Selectmen-led committee failed to deliver on its mandate and was never extended, and elected officials from Somerset now argue that they would like to see Brayton Point remain open, creating a fundamental tension with the Coalition for Clean Air that remains unresolved. Holyoke represents a middle ground of sorts between Salem and Somerset with respect to municipal engagement, as the City Council clearly acknowledged Mt. Tom's potential retirement and the need to plan accordingly by voting to authorize the creation of the CAG. However the CAG has since faced significant challenges with respect to how it works with the city, and as a result the group's work has stalled in recent months.

Stakeholder representation

The composition of local stakeholder bodies addressing issues of coal transition has varied greatly across coal communities in Massachusetts. In Salem the Mayor convened a group including local environmental, neighborhood, community development and economic development interests; Somerset's reuse committee was comprised mostly of members of town boards, with one spot going to a community resident; and Holyoke's CAG

consists of residents from across the city, some of whom have organizational affiliations but are not necessarily acting as representatives of those interests as CAG members. None of the aforementioned bodies include stakeholders from outside their immediate municipalities, which has emerged as a particular point of contention in the debate around Salem Harbor Station, given the role of organizations and residents from neighboring Marblehead in pushing that plant toward closure. Salem's process has also raised some concerns with respect to the non-inclusion of the Point Neighborhood Association (Haley 2013), but overall its stakeholders group does include diverse interests.

Public processes in Somerset and Holyoke, in contrast to Salem, have largely failed to engage a broad range of stakeholders. Members of Somerset's Coalition for Clean Air were excluded from the very reuse committee they sought to create and alleged that their Selectmen picked committee members from town boards who supported a do-nothing agenda, and the Holyoke CAG's structure as a loosely affiliated assembly of local residents (in contrast to AHH's structure as a coalition of organizations) has not given the group the political clout it needs to achieve its goals. The challenges the CAG has faced may be of particular note for the Coalition for Clean Air as the latter now seeks to create a new citizen transition committee independent of the Town of Somerset.

Public participation

The extent to which stakeholder processes have engaged the broader public has differed across Salem, Somerset and Holyoke. As part of its Jacobs study process, Salem held two public hearings in June and October 2011 that provided residents and organizations from Salem and neighboring communities with an opportunity to submit

comments. No follow-up forums were held after the study was completed in January 2012, and while meetings of the Mayor's current advisory board are open to the public, they are not oriented towards soliciting feedback. (This author attended an advisory board meeting on March 7, 2013; while taking comments and questions from non-members was listed as the final agenda item, it did not end up happening due to time constraints.) The arguably limited opportunities for public comment in Salem stand in contrast to processes in Somerset and Holyoke, which to date have not provided any such opportunities at all. The Selectmen-led reuse committee in Somerset did not commit to holding public forums for residents and the CAG in Holyoke faced severe capacity constraints with respect to its goal of hosting bi-monthly visioning sessions. As a result, broad public engagement around coal transition in both communities has been lacking.

This is not to suggest that there has been no recent public conversation around the future of coal in Somerset and Holyoke. Both the Coalition for Clean Air and AHH hosted public forums in April 2013 to discuss issues around the long-term viability of Brayton Point and Mt. Tom, respectively. Both events were attended by over 50 people and featured lively conversations over concerns related to jobs, tax revenue and public health. However these forums were not part of ongoing multi-stakeholder processes for coal transition planning; instead they were one-off events convened by groups that have advocacy-driven agendas. The Coalition for Clean Air did invite their event's attendees to join a new citizen transition committee, and whether that group will set up an ongoing process for public participation remains to be seen. Similarly, how local stakeholders and the broader public in Somerset and Holyoke are engaged as those communities eventually pursue reuse studies of their own is to be determined.

Provision of adequate resources

Resources are an important consideration with respect to coal communities' ability to understand their potential redevelopment options and sustain planning efforts around coal plant reuse. Salem demonstrated initiative in this arena by securing \$200,000 in state funding for its reuse study, which was conducted under the direction of a consulting team, and the city has continued to maintain technical consultants as it now evaluates Footprint's proposal. In addition city planning staff have provided ongoing support to the stakeholder groups convened by the Mayor. This example stands in stark contrast to the experience of Somerset, where the reuse committee failed to secure funds for a reuse study despite being authorized to do so by Town Meeting. In Holyoke the volunteer CAG's efforts have suffered from a lack of capacity and a lack of knowledge about reuse possibilities to propose to the broader community, and the city also lacks the staff necessary for a focused planning process around Mt. Tom. However both Somerset and Holyoke may soon benefit from infusions of state funds to support reuse studies and associated planning efforts.

The Massachusetts Task Force

While local communities in Massachusetts have been considering questions of coal transition for several years, in the past year the newfound engagement of state government has added another layer to the debate. In response to controversy over Footprint's proposed gas plant at Salem Harbor, state energy legislation passed in August 2012 created a state-level coal plant revitalization task force to develop plans by June 15, 2013 for the deconstruction, remediation and redevelopment of Salem Harbor Station by the end of 2016. The task force was also charged with developing similar plans by the end of 2013 for

other coal-fired power plants that may face closure by the end of 2017. The members of the task force as specified by the final bill are summarized below in Table 5.1, and the body has refined the scope of its work by creating three subcommittees: one focused on redevelopment at Salem Harbor (chaired by Salem Mayor Kim Driscoll), one focused on demolition of the old Salem Harbor Station and remediation of the broader site (chaired by Salem State Representative John Keenan) and one focused more broadly on developing legislative language for decommissioning coal plants throughout Massachusetts (chaired by Westfield State Senator Michael Knapik*).

Table 5.1: Members of the Salem Harbor Plant Revitalization Task Force

Constituency	Representative
The Secretary of Energy and Environmental Affairs or a designee, who shall serve as chair	Secretary Richard Sullivan
The Secretary of Housing and Economic Development or a designee	Secretary Gregory Bialecki
The Commissioner of Environmental Protection or a designee	Commissioner Ken Kimmel
The Attorney General or her designee	Paul Stakutis, designee
A representative of MassDevelopment	Marty Jones, President and CEO
A representative of an electric utility	Ron Gerwatowski, Deputy General Counsel, National Grid
A representative of the New England Power Generators Association	Dan Dolan, President
A representative from the International Brotherhood of Electrical Workers	James Simpson, Business Manager/Financial Secretary, IBEW Local 326
A Mayor of a city hosting a coal-fired generating plant	Mayor Kim Driscoll, Salem

A State Representative representing a community with a coal-fired generating plant	Representative John Keenan (D-Salem)
A State Senator representing a community with a coal-fired generating plant	Senator Michael Knapik (R-Westfield)*

* – Senator Knapik’s district includes Holyoke, the site of the Mt. Tom power plant.

As mentioned earlier, issues of engagement of government officials, stakeholder representation, public participation and adequate provision of resources that have varied among Salem, Somerset and Holyoke are also relevant to the task force’s work. Mark Sylvia, Commissioner of the Department of Energy Resources, has stated that it was a good decision for the legislature to have Secretary Richard Sullivan of the Executive Office of Energy and Environmental Affairs chair the task force, given the number of agencies falling under his purview that have a stake in issues of coal transition; Sullivan has declared his intent to be an “involved” chair (Sullivan and Sylvia 2013). This suggests a high level of commitment from the state government to address coal plant revitalization in Massachusetts. The Coal Free Massachusetts coalition has praised the creation of the task force as “a strong first step toward a 21st century power grid.”

On the other hand, the coalition has criticized the task force for lacking a seat at the table for the public and residents from coal plant communities and has called upon state officials “to establish a clear process for public engagement and opportunities for comment and input.” While several of the full task force and subcommittee meetings to date have been open to the public, similar to the stakeholders group meetings in Salem they have not provided opportunities for public comment. In addition most of these meetings have taken place in downtown Boston rather than in the impacted communities, and members of Coal Free Massachusetts have expressed concern that the task force’s primary focus on Salem

Harbor could mean that it will not adequately consider Brayton Point and Mt. Tom (Smith and Wool 2013). As a result the coalition and local allies in Somerset and Holyoke have pressured the task force to host public forums in these communities, and in response Secretary Sullivan has signaled his intent to do so in 2013 (Haddad 2013, Knapik 2013). The task force is also exploring options to secure reuse study funds for Somerset and Holyoke, providing one example of how resources at a state level can be used to benefit communities on the ground.

Discussion

The cases of coal communities in Massachusetts and the state task force broadly show that there is no consistent model for coal transition planning in the state. Nevertheless, their examples do offer insights into what effective planning might look like. The Salem stakeholders group and the state task force were both convened by high-ranking elected and government officials who have expressed a clear commitment to addressing issues of coal plant redevelopment. Both these efforts continue to move forward. On the other hand the Somerset Board of Selectmen did not extend its reuse committee in 2012 and the CAG process in Holyoke is on hold in part due to a lack of direct engagement with municipal officials. These experiences suggest that active involvement of government officials is critical to driving and sustaining public processes around coal transition. Such officials are well-positioned to convene a broad range of parties and to provide staff and other resources to support planning processes, and their engagement arguably creates clear channels for communication and accountability between stakeholder groups and gives these efforts greater legitimacy.

Including diverse stakeholders is another important consideration for enhancing the legitimacy and effectiveness of planning processes around coal transition. Salem, Somerset, Holyoke and the task force have all taken different approaches in this regard. Both the Salem stakeholders group and the state task force feature relatively broad-based stakeholder participation, in contrast to the former Somerset reuse committee and the Holyoke CAG. However both Salem and the task force still face shortcomings with respect to who is represented at their respective tables. As mentioned earlier Salem’s process has not really provided avenues for organizations from neighboring Marblehead to directly engage, and members of Coal Free Massachusetts have noted that the task force does not provide a seat for environmental or public health organizations or local citizens (Smith and Wool 2013). This lack of inclusion has not only generated political controversy, but has also deprived the aforementioned stakeholder bodies of relevant knowledge and expertise from parties who are extremely invested in issues of coal transition and have expended considerable resources, often in a volunteer capacity, to push for power plant cleanup and envision potential alternatives. This was also the case with the Somerset reuse committee, where the lack of advocacy representation led to severe criticism of the process from the Coalition for Clean Air.

In addition to engaging a diverse and representative range of stakeholder interests, the extent to which planning processes around coal transition in Massachusetts engage the broader public is another key issue. Only Salem’s effort has provided public hearings to date, and the process there has been criticized for only hosting these hearings while the Jacobs study was in development and for not providing opportunities for follow-up discussion (Schlichtmann 2012, Cleveland 2013). Similarly, Coal Free Massachusetts and

the Coalition for Clean Air have criticized the state task force and the Somerset reuse committee for not providing clear avenues for public engagement. While the task force's newfound intent to host forums in Somerset and Holyoke is a positive step, the possibility remains that these hearings may just be a one-off exercise. Such a scenario stands in contrast to principles of environmental justice, which call for "the right to participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement and evaluation" (Principles of Environmental Justice 1991). While achieving this ideal might not be feasible in every circumstance, the experiences of Salem, Somerset and Holyoke to date clearly show that planning for coal transition is a long-term process filled with challenges and therefore calls for long-term stakeholder and citizen engagement. Just as a lack of stakeholder inclusion causes political tension and leads to knowledge gaps, the same holds for public participation more broadly.

Finally, community planning processes must be supported by adequate resources. As discussed earlier, Salem was able to jumpstart its reuse efforts around Salem Harbor Station with \$200,000 in state funds and support from city planning staff. Similarly, the state task force has financial resources from relevant agency budgets, as well as dedicated staff capacity from employees at the state's Executive Office of Energy and Environmental Affairs. Somerset and Holyoke to date have been constrained by a lack of capacity and resources, but this dynamic may shift as the state task force explores options to secure reuse study funds for those communities and municipal staff become more engaged in related public processes in the future. In addition to helping communities identify funding streams, the task force's intent to host public forums in Somerset and Holyoke also reflects a potential expenditure of resources that can arguably be replicated to provide ongoing

opportunities for public engagement. Overall the task force highlights the potential for state and municipal governments to partner and leverage their collective assets to support coal transition planning.

The experiences of Salem, Somerset, Holyoke and the state task force to date clearly highlight the importance of active engagement of government officials, diverse and inclusive stakeholder tables, clear opportunities for public engagement and the provision of adequate resources to coal transition planning efforts. However fulfilling these criteria alone does not guarantee outcomes that reflect a community consensus or provide a roadmap for action moving forward. A case from Chicago provides insight into how such objectives might be achieved, and I turn my attention there in the sections that follow.

The Chicago Task Force

In criticizing the Massachusetts task force for not providing clear avenues for public engagement, environmental advocates characterized a planning process around retiring coal plants in Chicago as offering “adequate forums for public input and comment” (Coal Free Massachusetts 2012). This suggests that Chicago’s approach to coal plant redevelopment could provide a model for other communities dealing with similar issues. While an in-depth case study of Chicago is beyond the scope of this paper, I provide here a brief discussion of Chicago’s coal reuse task force to investigate whether its example can provide useful lessons for Massachusetts.

In February 2012 three community organizations in Chicago’s Pilsen and Little Village neighborhoods signed a memorandum of understanding (MOU) with the utility Midwest Generation that outlined a timeline of retiring the 326 megawatt Fisk and 542

megawatt Crawford coal plants by September 2012 (Fisk and Crawford Reuse Task Force 2012). The agreement marked the culmination of over a decade of community pressure to clean up and shut down these plants. Once the MOU was signed, in March 2012 Chicago Mayor Rahm Emanuel appointed a nine-member task force on revitalizing the coal plant sites. The members of the task force are listed below in Table 5.2. The group met 10 times between March and August 2012 “to develop a shared vision for redevelopment for the sites and to build consensus on suggestions for potential reuse” (Reuse Task Force 2012), The Sierra Club committed up to \$50,000 to support the stakeholder process, as did the Delta Institute, a non-profit sustainable development organization. The Delta Institute also provided outside facilitation for the task force’s efforts.

Table 5.2: Members of Mayor Emanuel’s Fisk and Crawford Reuse Task Force

Organization	Representative	Sector
Chicago Department of Housing and Economic Development	Kathy Dickhut, Deputy Commissioner	City government
Little Village Environmental Justice Organization	Kimberly Wasserman, Executive Director	Community
Pilsen Alliance	Nelson Soza, Executive Director	Community
Pilsen Environmental Rights and Reform Organization	Jerry Mean-Lucero, Organizer	Community
Chicago Board of Aldermen	Ricardo Munoz, Alderman, 22 nd Ward	Elected official
Chicago Board of Aldermen	Daniel Solis, Alderman, 25 th Ward	Elected official
Chicago and Cook County Building and Construction Trades Council	Tom Villanova, President	Labor
Commonwealth Edison	Bill McNeil, Vice President of Energy Acquisition	Utility
Edison Mission Group	Doug McFarlan, Senior Vice President of Public Affairs and Communications	Utility

In addition to participating in the group meetings, individual task force members had the opportunity to meet one-on-one with the Delta Institute to discuss their concerns and interests. The full task force also held two public hearings in Pilsen and Little Village in June 2012 to solicit feedback from the community. To further inform the task force process beyond these hearings, the Mayor's office set up an online forum to invite additional comments from the public, Alderman Solis's office and the Mayor's office conducted community surveys, and the Little Village Environmental Justice Organization, the Pilsen Alliance and the Pilsen Environmental Rights and Reform Organization conducted their own surveys and hosted their own public forums with community members and local stakeholders (Reuse Task Force 2012). In light of this expanded input, the task force's final report in September 2012 outlined nine guiding principles for potential redevelopment and 13 near-term recommendations for actions to advance these principles. Guiding principles included encouraging broad-based stakeholder input, emphasizing sustainability, creating quality living-wage jobs and providing public access to waterfronts; recommendations included establishing specifications for demolishing the facilities and reclaiming materials, determining the feasibility of waterfront access, exploring private sector interest in redevelopment and reconvening the task force to foster ongoing community cooperation and meet with potential purchasers of the coal plant sites (Reuse Task Force 2012).

Table 5.3 compares coal transition efforts in Massachusetts and Chicago with respect to Carlson's (1999) four-part framework for convening stakeholders: assessing the situation, identifying and engaging participants, locating the necessary resources to support the process, and planning and organizing the process. As described in the introduction to this thesis, these steps correspond to the four aspects of planning processes

Table 5.3: Comparison of Coal Transition Processes in Massachusetts and Chicago

<u>Unit of Analysis</u>	<u>Stage in Process of Convening / Criterion for Effective Planning</u>			
	Assessing the situation (Engagement from government officials)	Identifying and engaging participants (Diverse stakeholder representation)	Locating the necessary resources to support the process (Provision of adequate resources)	Planning and organizing the process (Opportunities for public participation)
Salem stakeholders group	Mayor Driscoll pursues reuse study and forms stakeholder group; reconvenes parties to form power plant advisory board	Environmental, neighborhood, economic and community development interests represented in an advisory capacity	City secures \$200,000 from state for reuse study; city planning staff supporting stakeholders group	Two public hearings held during Jacobs study; advisory board holding periodic meetings around Footprint's proposal
Somerset reuse committee	Town Meeting authorizes Board of Selectmen to create a reuse committee	Selectmen appoint members of town boards and one resident to reuse committee	Reuse committee fails to secure funds for a reuse study; potential state funds TBD	Reuse committee lacked process for public engagement and is now defunct
Holyoke Community Advisory Group (CAG)	City Council passes resolution creating CAG	Mayor and City Council appoint seven residents to CAG	City and state officials seeking \$50,000 in funds for a reuse study	CAG process stalled by lack of resources and engagement with the city
Massachusetts task force	Energy legislation creates task force; group convened by Secretary Sullivan	State agencies, elected officials, utility, power plant and labor interests represented	Agency staff supporting task force; considering reuse studies in Somerset, Holyoke	Task force holding periodic meetings; public forums in Somerset and Holyoke TBD
Chicago task force	Mayor Emanuel convenes task force on coal plant reuse	City agencies, elected officials, community, utility and labor interests represented in consensus-based process	Delta Institute and Sierra Club commit up to \$50,000 each to support process; Delta Institute provides third-party facilitation	Multifaceted engagement including public hearings, surveys and community forums; ongoing engagement emphasized

that I identified as important considerations earlier in this chapter. *Engagement from government officials* helps them and their communities gain an understanding of their particular situation, frameworks for *stakeholder representation* determine how parties come to the table, *provision of adequate resources* speaks for itself, and processes for *public participation* affect how the broader community gets involved. Chicago's task force performs well on all four criteria given Mayor Emanuel's role in convening the group, the diversity of the group and the involvement of outside facilitators in engaging participants, the investment of resources from the Delta Institute and Sierra Club to support the process, and the body's multifaceted approach to public engagement. All of these aspects of Chicago's process are worthy of emulation from other communities; beyond these issues related to convening, the example of Chicago highlights the potential for consensus building more broadly. This approach will be discussed more at length in the following section.

Learning from Chicago

The story of Chicago's approach to coal transition planning has several aspects in common with the experiences of communities in Massachusetts. In Chicago as well as Salem, Somerset and Holyoke, community organizations have provided the impetus for conversations around coal plant cleanup, shutdown and reuse. Similar to how Salem's Jacobs study outlined several redevelopment goals and priority land uses, the Chicago task force's report also discussed guiding principles for coal plant reuse. In addition, stakeholder processes in Chicago and Salem and the Massachusetts task force were all convened by high-ranking government officials and include participation from diverse stakeholder interests. However the broader scope, orientation and outcomes of these

bodies' work vary greatly. The Chicago task force's final report reflected a group consensus on vision, repeatedly emphasized the need for ongoing stakeholder engagement and assigned specific responsibilities to individual parties as part of its recommendations for near-term action. These points reflect the last three phases of the consensus building approach of facilitating group problem solving, reaching agreement and holding parties to their commitments (Susskind and Cruikshank 2006) and highlight the potential to develop proposals that meet the needs and interests of all participating stakeholders.

In contrast to Chicago's task force report, Salem's Jacobs study did not outline clear next steps, and stakeholder participation in that effort and the more recent review of Footprint's gas plant proposal has largely been limited to acting in an advisory capacity, rather than collectively creating a consensus vision for redevelopment. (The very fact that Salem's reuse study is generally referred to as "the Jacobs study" is arguably revealing in and of itself.) Once the Jacobs study was completed, the Salem stakeholders group lay dormant for over a year and did not reconvene until after the Salem Harbor site was sold to Footprint. On the other hand the Chicago report called for ongoing task force engagement, including meeting with potential site purchasers in advance. The Chicago task force also includes community stakeholders, unlike the Massachusetts task force, and has implemented a much broader array of public engagement strategies than either the Salem stakeholder group or the Massachusetts task force.

Chicago's example therefore highlights the potential for multifaceted public participation on an ongoing basis in Massachusetts. As the state task force moves towards creating its final reports on Salem Harbor in June 2013 and on other coal plants in

December 2013, and as Somerset and Holyoke explore the potential for reuse studies, will public processes provide mechanisms for interested parties to provide feedback at multiple stages as ideas, plans and reports are proposed, drafted and implemented? Will diverse stakeholders be directly involved in crafting consensus visions for redevelopment, or will their input be merely advisory or limited to technical considerations? Forthcoming reports and studies in Massachusetts can arguably provide opportunities for joint fact-finding via mutually agreed-upon experts so different parties can come to a common understanding of their situation and determine collaborative pathways for action accordingly. This may be particularly relevant in Somerset, where advocates and elected officials have sharply differing perspectives on coal plant redevelopment and the long-term viability of Brayton Point and have failed to work together effectively as a result.

The fundamental difference between Chicago's process and the experiences of communities in Massachusetts to date is that the former was explicitly framed as a consensus building effort to create a shared vision for redevelopment. Such processes by their very nature call upon diverse stakeholders to devise joint solutions to a given problem. The last two phases of the consensus building approach, reaching agreement and holding parties to their commitments, provide a clear framework for ongoing stakeholder collaboration and action. These ideals are reflected in the Chicago task force's principle of encouraging broad-based stakeholder involvement and recommendation to reconvene the task force. By articulating consensus as a goal and following a clearly defined process towards that goal, Chicago's task force has been able to circumnavigate many of the obstacles that have impacted community processes in Massachusetts.

Chicago's consensus-based process also highlights an important process consideration with respect to outside facilitation. Bringing in an independent professional "neutral" (the Delta Institute in Chicago's case) is a common characteristic of consensus building processes (Susskind and Cruikshank 2006) and stands in contrast to the examples of Salem and the Massachusetts task force, where the government officials convening relevant stakeholder bodies are also facilitating group processes. Mayor Driscoll and Secretary Sullivan themselves are stakeholders who have compelling interests in the outcome of their groups' deliberations, which could raise concerns about whether the processes they lead may be biased towards particular outcomes. This does not negate the valuable role that these elected officials have played and continue to play in convening diverse stakeholders, but it does suggest that outside facilitators might be better positioned to gain a deep understanding of the different interests in play and manage group conversations accordingly. This corresponds to the second phase of consensus building processes: assigning parties roles and responsibilities (Susskind and Cruikshank 2006). Elected officials may be well suited to act as convenors, but they may not be ideal candidates for steering a group towards consensus. Securing a professional neutral to support planning processes represents another potential expenditure of resources, but the example of Chicago suggests that the investment is worth it, given the benefits that can result from successful consensus building efforts.

As mentioned earlier, Chicago's task force is instructive with respect to how diverse stakeholders enable public participation in meaningful ways that go beyond merely hosting public hearings. More broadly, however, the successful case of Chicago highlights the potential for consensus building to provide platforms for ongoing collaboration between

stakeholders and the public that result in clearly actionable plans. Planning efforts in Massachusetts can mirror Chicago's example by investing resources to directly support community-driven processes and secure outside facilitation, in addition to investigating what reuse options are technically feasible; the case of Salem shows that while the latter is a necessary step, it is insufficient to develop an action-oriented redevelopment agenda that reflects stakeholder and community consensus. Forthcoming community processes also provide opportunities to use aspects of the consensus building approach to maximize the potential for joint fact-finding, to develop collective visions for coal plant reuse as opposed to reacting to preconceived agendas and proposals, and to articulate concrete next steps in a way that holds all parties accountable. While Salem, Somerset, Holyoke and the Massachusetts task force have faced challenges around these issues to date, the road ahead is still long and the nature of future public processes is yet to be determined. With the state task force as a partner, coal communities in Massachusetts may yet realize the potential for consensus as they pursue broader visions of sustainable redevelopment.

Chapter 6: Conclusion

As communities in Massachusetts and across the country confront critical process-related issues with respect to coal transition planning, it is important to consider how local redevelopment agendas might interface with regional economic development concerns and state-level sustainability policies. While an in-depth examination of these issues is beyond the scope of this paper, I nonetheless offer below some concluding thoughts about how coal communities in Massachusetts might address these topics in coordination with stakeholders at a regional and state level, while taking the process considerations described earlier in this thesis into account.

The Potential for Regional Planning

Grassroots engagement around coal plant issues in Massachusetts has historically transcended jurisdictional lines. The Salem Alliance for the Environment and Marblehead's HealthLink worked together for years to bring Salem Harbor Station to the verge of retirement, Somerset's Coalition for Clean Air has long included members from neighboring communities like Westport and Fall River, and activists in Northampton, Easthampton and Amherst have all been active in the Sierra Club's efforts to shut down Mt. Tom in Holyoke. A continued desire for regional cooperation was apparent at the April 2013 forums hosted by Action for a Healthy Holyoke and Coalition for Clean Air, where attendees from neighboring communities noted that the challenges presented by Mt. Tom and Brayton Point were not of concern only for Holyoke and Somerset residents.

There may be potential for state and municipal officials to mirror this collaborative spirit across city and town boundaries by implementing regional planning approaches to coal plant transition. While much of the debate around retiring coal plants has focused on concerns about replacing the lost tax revenue in the host municipalities, the fact remains that tax collections from these plants have been declining for years, highlighting the need for diversified economic development strategies. Somerset State Representative Patricia Haddad has argued that towns like Somerset need to bring in new types of businesses to remain financially viable and has suggested that groups of towns could collectively lift up the unique strengths they bring to the table to attract new investment and development (Haddad 2013). Such regional planning efforts could ensure that economic development gains around coal plant reuse create additional value and are not circumscribed to the plant's host community, while helping to alleviate inter-jurisdictional tensions like those that have been a backdrop to planning processes in Salem. Planning regionally is listed as one of the state's Principles for Sustainable Development (Commonwealth of Massachusetts 2007), and the state coal plant revitalization task force and its affiliated agencies, as well as regional planning agencies like the Metropolitan Area Planning Council, the Southeastern Regional Planning and Economic Development District and the Pioneer Valley Planning Commission, are arguably well positioned to convene elected officials and stakeholders on a regional scale to develop broader visions around coal plant redevelopment.

State Policy and Sustainability

Massachusetts' task force on coal plant revitalization has firmly placed coal transition on the agenda of state policymakers. As the task force develops its plans and considers how to support the communities of Salem, Somerset and Holyoke in their local planning efforts, it must also determine how potential redevelopment outcomes advance broader energy and sustainability policy goals at a state level. The recent Department of Public Utilities (DPU) docket with respect to long-term contracts as an appropriate means to secure generating capacity, which was spurred by controversy over Footprint's gas plant proposal at Salem Harbor, is emblematic of these issues. The DPU ruled that additional generating capacity was needed in the Northeast Massachusetts region, leading Footprint and supporters of its project argue that the gas plant is necessary to ensure grid reliability and will deliver benefits to ratepayers and the environment (Keenan 2013). Footprint's critics, on the other hand, argue that the capacity needs can be met through transmission upgrades, that the ratepayer benefits of the proposed plant are dubious and that carbon emissions from the plant would "[defy] state mandates to meet the Global Warming Solutions Act of 2008" (Clean Water Action 2013). This debate shows that state policymakers and regulators state have a clear role to play in determining whether or not it is appropriate or necessary to repower coal plant sites with gas to ensure broader electrical grid reliability.

The potential to convert coal plant sites to gas also raises broader concerns about sustainability and climate change. As described in the introduction of this paper, a deluge of cheap gas from shale deposits has helped lead to a significant decrease in coal's share of

the electricity generation portfolio in the U.S. Task force chair Richard Sullivan has stated that renewables and natural gas are both steps in the right direction towards meeting Massachusetts' target of reducing greenhouse gas emissions 25 percent below 1990 levels by 2020 (Sullivan and Sylvia 2013). A push towards gas, however, appears to be inconsistent with the state's Sustainable Development Principles, which call for "[reducing] greenhouse gas emissions and consumption of fossil fuels" (Commonwealth of Massachusetts 2007). While gas is often presented as a "bridge" fuel to a low-carbon clean energy future, Levi (2013) concluded in a study of potential bridge fuel scenarios that "in the context of the most ambitious [climate] stabilization objectives (450 parts per million [ppm] CO₂), a natural gas bridge is of limited direct emissions-reducing value." Hansen et al (2008) have called for an even more stringent target of 350 ppm, and in addition Jacoby et al (2012) have stated that increased usage of shale gas could diminish the market for other low-emissions technologies over the next two decades.

Taken together, these arguments suggest that increased usage of gas may be insufficient to mitigate severe climate change impacts and could undermine progress towards renewable energy development. With respect to issues of grid capacity, the Massachusetts Department of Energy Resources (2008) has found that Massachusetts has 3,500 additional megawatts of economically feasible renewable energy potential by 2020, and Jacobson et al (2013) have devised a plan by which neighboring New York State could meet 100 percent of its electricity needs from renewable sources (wind, water and sunlight) by 2030. Both of these reports therefore suggest that there are potential pathways to enable Massachusetts to maintain a reliable grid without increasing its already substantial dependence on gas for over 50 percent of its electricity needs.

Several people interviewed for this thesis mentioned how the current discourse around coal plants in Massachusetts and their potential retirement represents a sea change compared to five years ago, when imagining a coal-free future was not part of the conversation (Ehrlich 2013, Knapik 2013). Some local activists who had previously called for gas conversion as a solution at Salem Harbor and Mt. Tom are now increasingly expressing concerns over the environmental and climate change impacts of hydraulic fracturing extraction processes and the broader natural gas life cycle (Bright and Nadeau 2013, Vickery 2013), suggesting that the dialogue around gas may be starting to shift as well. Marblehead State Representative Lori Ehrlich has filed “An Act for a Clean Energy Commonwealth” that would put the force of law behind the Coal Free Massachusetts coalition’s goal of phasing out coal by 2020; she has revised the current version of her bill “to be less welcoming to gas” (Ehrlich 2013) compared to previous versions of the legislation, which specifically called for assessing the potential for gas conversion at coal plant sites. In addition to such technical considerations, Rep. Ehrlich (2013) also mentioned broader philosophical issues in reflecting on her 15 years of engagement around Salem Harbor Station: “I’ve been doing some serious soul-searching. Why did I do all this work for [Footprint] to come in and put in another fossil fuel plant?”

Here it is worth emphasizing that there are many potential creative reuses of coal plant sites that can meet local communities’ needs for jobs, tax revenue and economic development without involving energy generation, gas-fired or otherwise. The experiences of Salem, Somerset and Holyoke to date already demonstrate this to some degree. While there may be various regulatory and economic constraints to implementing different options, Salem’s Jacobs study, the 2008 Brattle Group report, Jan Schlichtmann’s marine

biotech research proposal and the Coalition for Clean Air’s mixed-use development vision all revolve around non-energy related ideas for coal plant reuse that may be worthy of future consideration; former power plants in Baltimore and Chicago that have been redeveloped as a shopping complex and a charter school highlight additional possibilities in a more concrete fashion (Witkin 2013). The state’s role in approaching such redevelopment options need not be circumscribed to determining whether or not coal plants should be repowered. In fact many of the reuse scenarios outlined above would arguably benefit from state subsidies, and the state task force and other relevant agencies can take a proactive role by working with municipal governments and other relevant stakeholders to encourage and fund particular types of redevelopment projects that truly align with Massachusetts’ Sustainable Development Principles.

Looking Forward

The potential for working with stakeholders on a regional and a state level to address broader concerns about economic development and sustainability arguably represents a new direction for municipalities that are accustomed to focusing on their individual jurisdictions. This paper does not attempt to prescribe in great detail what expanded coal transition planning processes that bring together municipal, regional and state interests might look like. However it stands to reason that many of the recommendations outlined earlier in this thesis would apply. Regardless of scale, ensuring that diverse stakeholders are represented, creating opportunities for the public to meaningfully engage, providing an adequate amount of resources and enabling the active involvement of government officials at all relevant levels remain important considerations

for effective planning efforts. Regional planning agencies and state government officials are arguably well-positioned to convene stakeholders on a regional scale across municipalities, while local officials are well-situated to do the same within their individual cities and towns. Local officials also bring a critical viewpoint with respect to how local reuse visions might address local economic, environmental and health concerns, while state officials can offer a broader perspective of how redevelopment proposals align with state energy and sustainability policies and provide resources to invest in projects that align with their sustainable development goals. Integrating elements of a consensus building approach, such as outside facilitation and joint fact-finding, can further steer these processes towards actionable outcomes that have broad-based stakeholder buy-in.

While Massachusetts has a long history of leadership on environmental issues, it remains to be seen how coal transition outcomes in the state might provide a potential model for the rest of the country. Overall though it is clear that moving forward, local communities and state policymakers in Massachusetts have a critical role to play in determining how coal plant redevelopment proposals fit into a broader vision of a clean energy future. Just as Massachusetts' progressive policies on climate and energy are in some respects a model for the rest of the nation, how the state addresses the question of coal plant retirement in coordination with local interests in Salem, Somerset and Holyoke may similarly have ripple effects beyond its borders.

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Jeff Bar-Snell. Salem Alliance for the Environment (SAFE).

Jane Bright and Lynn Nadeau. HealthLink.

Adrian Dahlin. Vice Chair, Holyoke Community Advisory Group (CAG).

Kim Driscoll. Mayor of Salem.

Lori Ehrlich. Massachusetts House of Representatives (D-Marblehead).

Drew Grande. Beyond Coal Organizer, Sierra Club.

Patricia Haddad. Massachusetts House of Representatives (D-Somerset).

Linda Haley. Historic Derby Street Neighborhood Association.

Al Lima. Coalition for Clean Air.

Stu Mahjoory. Somerset Board of Selectmen.

Marcos Marrero. Director, Holyoke Office of Planning and Economic Development.

John Keenan. Massachusetts House of Representatives (D-Salem).

Michael Knapik. Massachusetts Senate (R-Westfield).

Pauline Rodrigues. Coalition for Clean Air.

Becky Smith and Joel Wool. Water Organizer, Clean Water Action and Clean Energy Organizer, Clean Water Action.

Richard Sullivan and Mark Sylvania. Secretary, Executive Office of Energy and Environmental Affairs and Commissioner, Department of Energy Resources.

Frank Taormina. Harbor Planner, Salem.

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