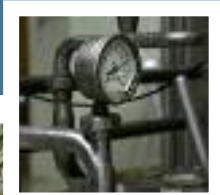




Massachusetts Energy Efficiency Workforce Needs Study HVAC/R and Plumbing Firms, 2009



This survey was administered in March, 2009 as part of an Energy Efficiency Workforce Needs Study conducted by GasNetworks, the New England Clean Energy Council, and JFYNetWorks. Survey participants were drawn from GasNetworks email contacts and from a set of 400 HVAC/R and plumbing companies affiliated with the Cool Smart program. Fifty-three companies responded to the survey, providing information about their current workforce, hiring expectations, training practices, and participation in government energy efficiency programs.

A summary of the survey questions and answers follows.

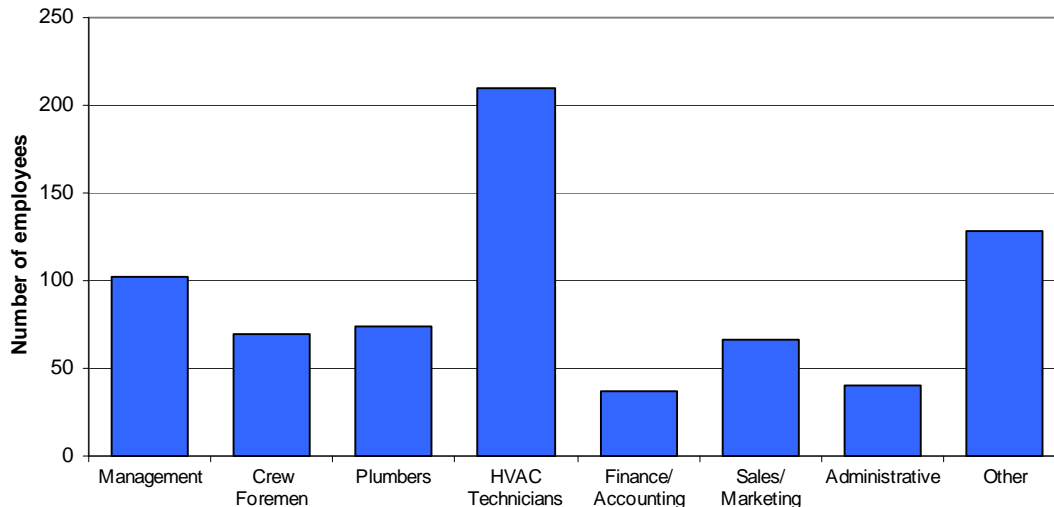
1. How many people does your firm employ in Massachusetts?

Average	Total	Minimum	Maximum
14.1	693	1	100

2. How many of your firm's employees in Massachusetts are employed in each of the following categories? Please assign each person to only one category.

	Total employees in MA	Average of respondents with that category of employee
Management	102	2.8
Crew Foremen	70	2.5
Plumbers	74	2.6
HVAC Technicians	210	4.9
Finance/Accounting	37	1.6
Sales/Marketing	66	3.3
Administrative	40	1.7
Other	128	9.1

Massachusetts employees of all survey respondents



3. How long does an average employee stay with your company?

Minimum (years)	Maximum	Average
1	30	9.6

4. What could be done to improve employee retention?

	1 Strong Yes	2 Weak Yes	3 Weak No	4 Strong No	Rating Average (scale 1-4)
Higher Pay	53.3% (24)	33.3% (15)	8.9% (4)	4.4% (2)	1.6
Better Benefits	54.3% (25)	30.4% (14)	6.5% (3)	8.7% (4)	1.7
Training/Education	41.9% (18)	39.5% (17)	16.3% (7)	2.3% (1)	1.8
Other	50.0% (2)	50.0% (2)	0	0	1.5

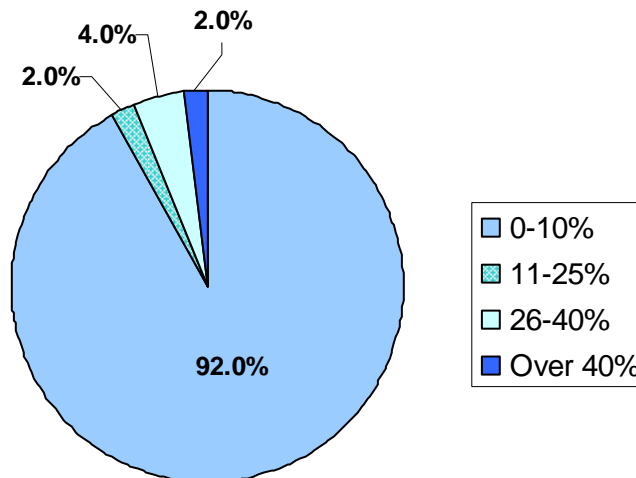
Other:

- Enough work that I can have everyone working 52 weeks a year
- Less government intrusion into their lives
- Positive company culture
- We have the workforce with the greatest longevity around the area.

5. What percent of your workforce do you estimate will retire in the next 5 years?

	Percent of respondents	Number of respondents
0-10%	92.0%	46
11-25%	2.0%	1
26-40%	4.0%	2
Over 40%	2.0%	1

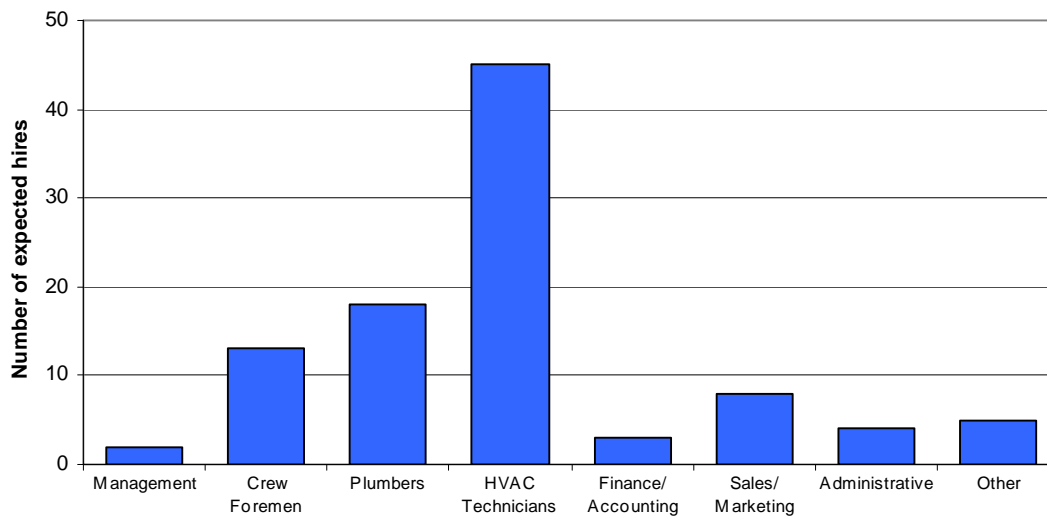
Portion of respondents indicating each expected retirement percentage over the next five years



6. How many new people in each of these categories do you expect to hire in 2009?

	Total expected hires in MA	Average of respondents hiring in that category
Management	2	1.0
Crew Foremen	13	2.2
Plumbers	18	1.6
HVAC Technicians	45	1.9
Finance/Accounting	3	1.0
Sales/Marketing	8	1.1
Administrative	4	1.3
Other	5	1.3

Total expected 2009 hires by survey respondents



7. What are your best recruiting sources for new employees?

	1 Strong Yes	2 Weak Yes	3 Weak No	4 Strong No	Rating Average (scale 1-4)
Relatives	14.3% (5)	31.4% (11)	31.4% (11)	22.9% (8)	2.6
Friends	15.8% (6)	52.6% (20)	15.8% (6)	15.8% (6)	2.3
Classified Ads	20.0% (8)	32.5% (13)	37.5% (15)	10.0% (4)	2.4
Online Job Postings	23.1% (9)	35.9% (14)	28.2% (11)	12.8% (5)	2.3
Unemployment Office	0.0% (0)	5.7% (2)	48.6% (17)	45.7% (16)	3.4
Vocational Technical High School	26.3% (10)	55.3% (21)	10.5% (4)	7.9% (3)	2.0
Technical/Community College	25.0% (9)	44.4% (16)	19.4% (7)	11.1% (4)	2.2
Four-year College	17.6% (6)	35.3% (12)	26.5% (9)	20.6% (7)	2.5
Co-worker Referrals	47.5% (19)	47.5% (19)	2.5% (1)	2.5% (1)	1.6
Other	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0

8. When hiring in 2009, do you anticipate difficulties finding qualified candidates?

	1 Very difficult	2 Difficult	3 Not very difficult	4 Easy	Rating Average (scale 1-4)
Crew Foremen	9.1% (3)	42.4% (14)	30.3% (10)	18.2% (6)	2.6
Plumbers	2.9% (1)	31.4% (11)	48.6% (17)	17.1% (6)	2.8
HVAC Techs	17.1% (7)	34.1% (14)	34.1% (14)	14.6% (6)	2.5

9. Where do you prefer to send your employees for training?

	1 Frequently	2 Sometimes	3 Rarely	4 Never	Rating Average (scale 1-4)
Your company	47.4% (18)	47.4% (18)	2.6% (1)	2.6% (1)	1.6
Utility companies	11.8% (4)	47.1% (16)	17.6% (6)	23.5% (8)	2.5
Independent lab	3.2% (1)	32.3% (10)	29.0% (9)	35.5% (11)	3.0
Vocational schools	16.7% (6)	36.1% (13)	16.7% (6)	30.6% (11)	2.6
Community colleges	12.5% (4)	9.4% (3)	40.6% (13)	37.5% (12)	3.0
Trade associations	44.2% (19)	37.2% (16)	11.6% (5)	7.0% (3)	1.8
GasNetworks	33.3% (13)	38.5% (15)	10.3% (4)	17.9% (7)	2.1
New England Fuel Institute	9.7% (3)	19.4% (6)	29.0% (9)	41.9% (13)	3.0
For-profit trainers	20.0% (6)	30.0% (9)	13.3% (4)	36.7% (11)	2.7
Community-based nonprofits	0.0% (0)	13.3% (4)	16.7% (5)	70.0% (21)	3.6
Labor unions	0.0% (0)	0.0% (0)	6.7% (2)	93.3% (28)	3.9
Conferences	20.6% (7)	58.8% (20)	11.8% (4)	8.8% (3)	2.1
Online training programs	9.4% (3)	37.5% (12)	31.3% (10)	21.9% (7)	2.7
Other	33.3% (3)	22.2% (2)	22.2% (2)	22.2% (2)	2.3

Other:

- Dealer training
- Distributors
- Manufacturer
- Suppliers
- Supply Houses

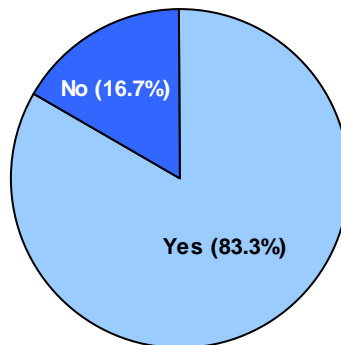
10. Would a partially subsidized energy efficiency training center be useful to you for training your employees?

1 Strong Yes	2 Weak Yes	3 Weak No	4 Strong No	Rating Average (scale 1-4)
58.7% (27)	34.8% (16)	4.3% (2)	2.2% (1)	1.5

11. Does your firm offer apprenticeships or internships?

	Percent of respondents	Number of respondents
Yes	83.3%	40
No	16.7%	8

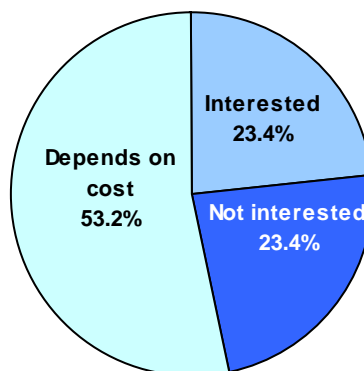
Percent of respondents offering apprenticeships or internships



12. Would you be interested in financially supporting an intern or apprentice pursuing an energy efficiency career for a short period of “on the job” learning at your firm?

	Percent of respondents	Number of respondents
Yes	23.4%	11
No	23.4%	11
Depends on the cost	53.2%	25

Interest in supporting an energy efficiency intern or apprentice



13. Would access to low-cost financing be helpful for expanding?

1 Strong Yes	2 Weak Yes	3 Weak No	4 Strong No	Rating Average (scale 1-4)
47.8% (22)	30.4% (14)	10.9% (5)	10.9% (5)	1.9

14. What would you use financing for?

	1 Strong Yes	2 Weak Yes	3 Weak No	4 Strong No	Rating Average (scale 1-4)
Trucks	45.9% (17)	37.8% (14)	13.5% (5)	2.7% (1)	1.7
Equipment	55.9% (19)	32.4% (11)	8.8% (3)	2.9% (1)	1.6
Insurance	9.7% (3)	25.8% (8)	29.0% (9)	35.5% (11)	2.9
Materials	27.6% (8)	17.2% (5)	20.7% (6)	34.5% (10)	2.6
Employees	28.1% (9)	31.3% (10)	21.9% (7)	18.8% (6)	2.3
Training	27.3% (9)	51.5% (17)	9.1% (3)	12.1% (4)	2.1
Other	75.0% (3)	0.0% (0)	0.0% (0)	25.0% (1)	1.8

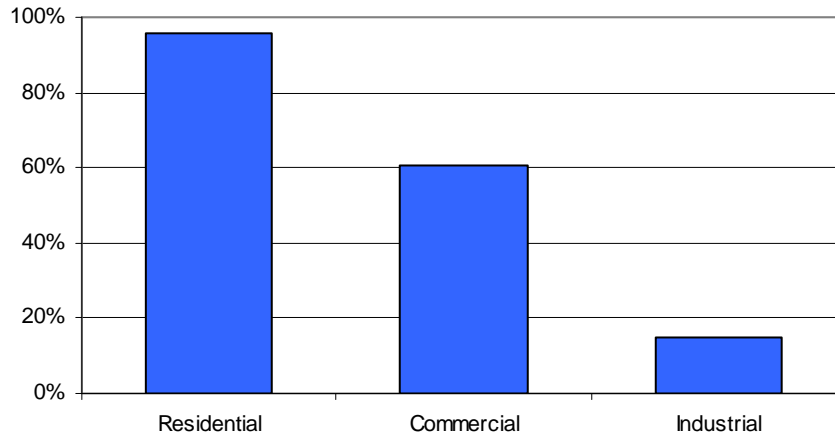
Other:

- Advertising
- Expansion and Marketing
- Financing renewable energy installations
- Not needed
- Projects
- Shop

15. In 2008, did your company perform work related to, and/or receive rebates from, the energy efficiency programs of any Massachusetts utility companies?

	Yes	No
Residential	95.8% (46)	4.2% (2)
Commercial	60.5% (23)	39.5% (15)
Industrial	14.7% (5)	85.3% (29)

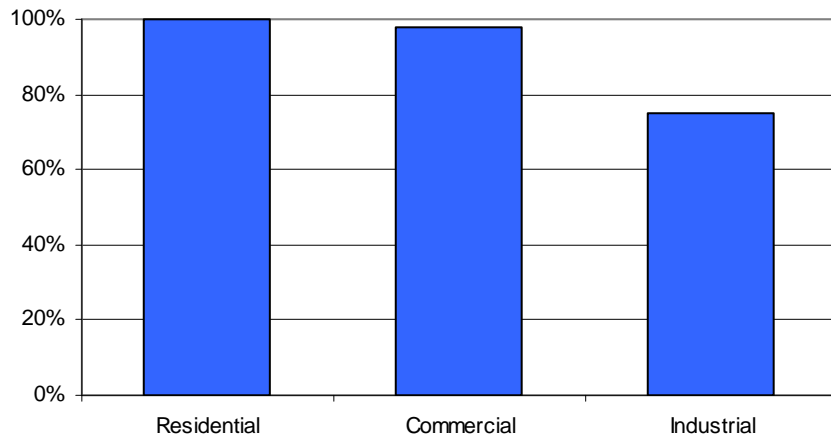
Percent of respondents performing work related to MA utility EE programs, by facility type



16. Whether or not you have previously been involved, would your company be interested in increasing the amount of business you do involving the energy efficiency programs of Massachusetts' utility companies?

	Yes	No
Residential	100.0% (48)	0.0% (0)
Commercial	97.8% (44)	2.2% (1)
Industrial	75.0% (27)	25.0% (9)

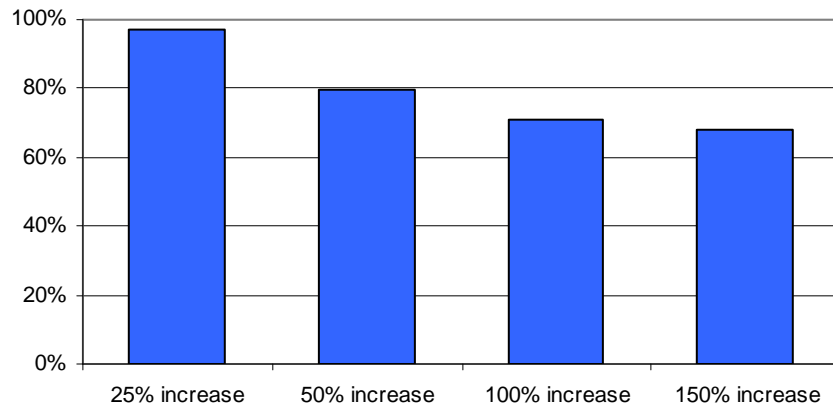
Percent of firms interested in increasing work related to MA utility EE programs, by facility type



17. If more work were available, would you be interested in increasing production by each of the following amounts?

	Yes	No
25% increase	97.2% (35)	2.8% (1)
50% increase	79.4% (27)	20.6% (7)
100% increase	71.0% (22)	29.0% (9)
150% increase	67.9% (19)	32.1% (9)

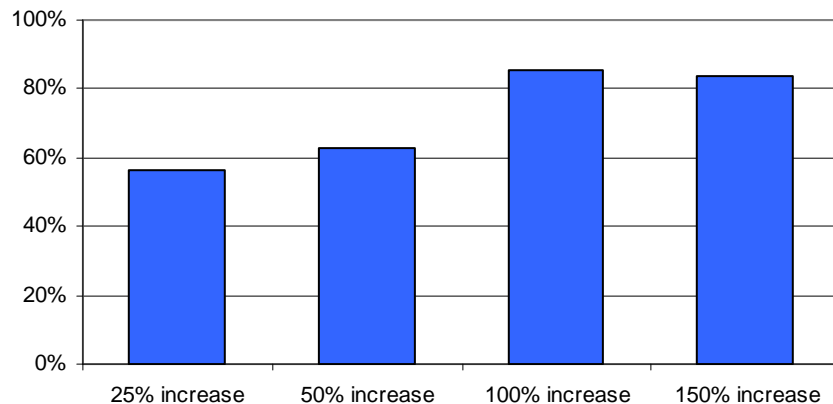
Percent of firms interested in increasing production by various amounts



18. In order to increase production by each of the following amounts, would you need to increase your staff?

	Yes	No
25% increase	56.4% (22)	43.6% (17)
50% increase	63.0% (17)	37.0% (10)
100% increase	85.2% (23)	14.8% (4)
150% increase	84.0% (21)	16.0% (4)

Percent of firms needing to increase staff in order to increase production by various amounts



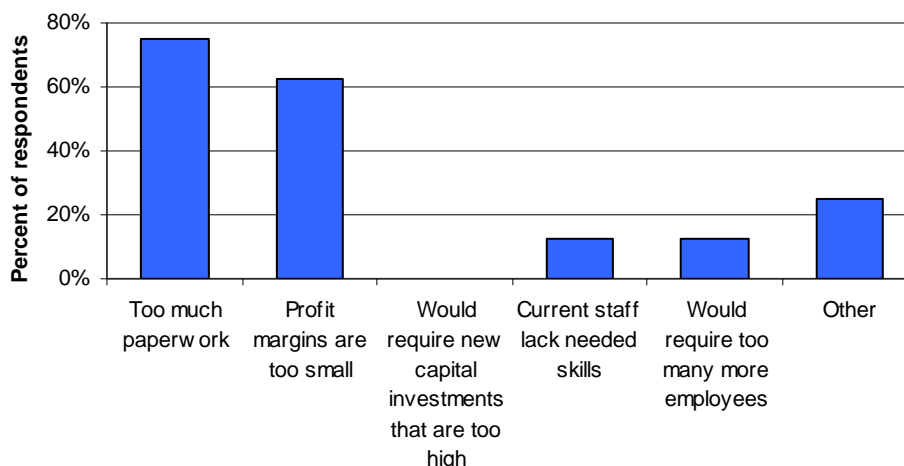
19. If you are NOT interested in increasing the amount of business you do involving the energy efficiency programs of Massachusetts utility companies, please share your reasons.

	Percent of respondents	Number of respondents
Too much paperwork	75.0%	6
Profit margins are too small	62.5%	5
Would require new capital investments that are too high	0.0%	0
Current staff lack needed skills	12.5%	1
Would require too many more employees	12.5%	1
Other	25.0%	2

Other:

- A lot of competition
- Most interested in helping with training partnership

Reasons for not wanting to increase work related to MA utility EE programs



20. Please share any comments that would help us understand your current workforce needs, current participation in energy efficiency programs, and your interest in expanding this part of your business.

Responses:

- All we need is more money for rebate programs especially low-income housing and non-profits. The program used to have 100% subsidy for low-income.
- Energy efficiency does sell. Customers like the rebates.
- Energy programs, rebates, residential and commercial programs
- I am very interested in putting my knowledge and training skills in furthering the goals of the GasNetworks program.
- I would be willing to take on any installations. Currently I do the work myself but would consider hiring if workflow stayed consistent, especially during these economic times.

- It is great for utilities to give incentives for higher efficiency equipment with rebates, but the industries would be better off if the gas utility would stop giving away equipment and indirectly installing with poorly trained installers and service people. The private sector is better trained & equipped.
- Need more leads.
- We are a manufacturer of boilers and baseboards. We are the only Mod/Con high efficiency boiler made in the USA. We offer training.
- We are in the retail oil business and recently expanded to include lp gas and natural gas installations and conversions. We have several young employees training for journeymen, master plumbing, and gas fitting licenses. We were involved in the 1980's with hydronic solar energy and are looking to re-enter that marketplace this season. In addition, we have two retail stores where we sell energy efficient space heaters, instantaneous water heaters, vent free heaters, and barbeque grills.
- We are very interested in expanding into the commercial area of HVAC work. We have a small company, and in order to do this we would need more employees who are qualified to perform this work. We will be searching for such personnel this year.
- We have found it difficult to work with the Cool Smart program. The worst problem to date has been getting paid in a timely fashion. It has been so bad that we have simply stopped emphasizing it to customers. I will not voluntarily work with a program/customer if I have to re-send the paperwork multiple times and still have to wait 6 months to get paid. I came to personally believe that this Cool Smart program was a setup/gift for the large utilities, that nobody there cares about small contractors like us. (Maybe I'm wrong, after all it is possible that they treat everyone poorly!)

Appendix A: Survey respondents who provided their names

Auburn, MA

General Mechanical

Billerica, MA

Affordable Heat & Air

Boxborough, MA

Muirfield Mechanical, LLC

Buzzards Bay, MA

Haglof, Inc. Heating and Cooling

Canton, MA

Frank Lamparelli Oil Co., Inc.
Minglewood Associates

Charlestown, MA

Farina Corporation

Danvers, MA

Cranney Companies

Dedham, MA

Gassco, Inc.

East Falmouth, MA

Barrett Plumbing and Heating, Inc.

East Providence, RI

Elmhurst Engineering, Inc.

East Taunton, MA

Slant Fin Corp.

Fall River, MA

G.M. Refrigeration Company

Foxboro, MA

Prevett Heating & Cooling, Inc.

Goshen, MA

George Propane, Inc.

Great Barrington, MA

Harland B. Foster, Inc.

Hyannis, MA

Robies Heating and Cooling

Littleton, MA

Acton Refrigeration, Inc.

Lowell, MA

David M. Murphy Plg. Heating, Inc.
Druziako HVAC, Inc.

Lunenburg, MA

A&R Mechanical, Inc.

Merrimack, NH

Gas Service of Merrimack, Inc.

Marlboro, MA

CPS Heating & Cooling

Milton, MA

S.G. Harold Plumbing Heating & Air
Conditioning, LLC

North Adams, MA

Vareschi Plumbing & Heating

North Attleboro, MA

Briggs Mechanical, Inc.

North Chelmsford, MA

Ayotte Plumbing, Heating & A/C, Inc.
Frank Gouveia Plumbing Contractors,
Inc.

Norwood, MA

B & D Air Conditioning & Gas Heating,
Inc.
Davco Air Conditioning and Heating
Corp.
Suburban Sheet Metal & Suburban
Service Corp.

Peabody, MA

Oasis Temperature Systems Corp.

Reading, MA

AccuAire, Inc.
Cooling Unlimited, Inc.

Somerville, MA

LittleFoot Energy
Tipperary Plumbing and Heating

South Dennis, MA

Hall Oil Co., Inc.

South Weymouth, MA

Alvin Hollis Co.

Springfield, MA

Hurley & David, Inc.

Taunton, MA

James Spearin Heating & Air
Conditioning, Inc.

Waltham, MA

Stephen Brown Plumbing and Heating

Warwick, RI

NRG Circle

Watertown, MA

Airco Home Comfort Services, LLC

Weymouth, MA

Scopa Plumbing

Wilmington, MA

St. Jean Heating and Cooling

Woburn, MA

Climate Technologies, Inc.

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