Results of Interviews with Energy Efficiency Organizations, Utilities and Energy Service Companies

Terminology:

Energy Efficiency Organization: An organization that manages energy efficiency programs in a state.

Energy Service Company (ESCO): When used below, the term "ESCO" more or less meets the definition provided by the National Association of Energy Service Companies (NAESCO): "ESCOs develop and implement turnkey, comprehensive energy efficiency projects. ESCOs offer performance-based contracts (i.e., contracts that tie the compensation of the ESCO to the energy savings generated by the project) as a significant part of their business."

Source: http://www.naesco.org/meminfo.htm#WhatisESCO

Electrical contractor: Electrical contractors may be employed by a utility, a business or

an ESCO to do lighting work.

Energy Efficiency Organizations			
Contact	Summary		
Efficiency Vermont Gabe Arnold Lighting Coordinator 802-860-4095 x1085	Incentive Program: If a business wants to do a lighting retrofit, the business or its electrical contractor will approach Efficiency Vermont with a project in mind. Efficiency Vermont will put together an incentive package for that project, which is provided to the business. In other cases, a business wants to do something to save on energy costs, but will not have a specific project in mind. They will first seek guidance from Efficiency Vermont on planning a lighting retrofit project. Efficiency Vermont will put together an incentive package for the project once the planning is completed. In either case, the business hires its own electrical contractor to do the work. Efficiency Vermont has a listing of contractors on its website that businesses can use. Recycling of spent lamps is the responsibility of the business receiving the incentive. There is information on Efficiency Vermont's website regarding where a business can go to recycle lamps. (Note: I couldn't find this information on their website. If it's there, it's well hidden.) Efficiency Vermont also encourages people to use appropriate hazardous waste facilities. Prescriptive Lighting Program: Businesses that purchase a limited number of lamps from an approved list of models (as opposed to doing an extensive retrofit) may submit a rebate application form to Efficiency Vermont. The application form mentions the importance of recycling and directs businesses to the Efficiency Vermont website for a list of licensed lamp recyclers.		
	Training Programs: Efficiency Vermont holds training sessions for		

electrical contractors on new lighting technologies, lighting design, etc. The success of these sessions has been limited due to low attendance. Efficiency Vermont also holds training sessions for lamp suppliers, who are more likely to take advantage of training sessions than the electrical contractors.

Opportunities for Collaboration: Gabe Arnold would be interested in incorporating information on lamp recycling into the training sessions he holds for electrical contractors and suppliers.

New York State Energy Research and Development Authority (NYSERDA)

Liz Perry 212-971-5342 x3017 eperry@nycedc.com

Charle-pan Dawson 212-862-1090 x3244 cad@nyserda.org NYSERDA serves the whole state with its energy efficiency programs, with the exception of some areas served by utilities that administer their own programs rather than pay into the fund that supports NYSERDA's. These are the Long Island Power Authority (LIPA), the New York Power Authority (NYPA), and the municipal utilities.

Smart Equipment Choices Program: If a business wants to do a large scale lighting retrofit, they submit an application to NYSERDA indicating the type of lights they are going to install. If NYSERDA approves of their plan, NYSERDA will provide an incentive. The business will find its own contractor to do the retrofit. There is no requirement for lamp recycling in this program.

LEEDS Certification Program for New Construction: A building owner receives recognition for meeting certain criteria. There is no requirement to recycle lamps to receive LEEDS certification, but a building owner can receive credit towards LEEDS certification by setting up a maintenance program in which all spent bulbs are recycled and only low mercury bulbs are installed. LEED certified new construction can receive incentives from NYSERDA based on the energy performance of the building.

New Construction Program – Pre-Qualified Section: A building owner can receive incentives from NYSERDA for carrying out a few energy efficiency measures, or improving energy efficiency in just part of a building. The building owner finds her own contractor to do the work. There is no requirement for lamp recycling in order to receive the incentive.

Training Programs: NYSERDA holds training programs for electrical contractors.

Opportunities for Collaboration: NYSERDA would be interested in incorporating information about lamp recycling into their trainings, as well as receiving assistance on incorporating lamp recycling requirements into their incentive programs. Contact Charle-pan Dawson. Include sufficient information in the email from the summary above to remind her of the discussion that I had with her and Liz Perry on 3/8/05.

Meetings of Energy Efficiency Program Managers: NYSERDA holds annual meetings with representatives of all the energy efficiency programs in the state. DOE/Boston also convenes meetings with representatives of energy efficiency programs in New York State. Incentive Program: Program advisors such as Tim Clark go out into the **Efficiency Maine** business community and promote Efficiency Maine's incentive programs. Linda Vains Alternatively, a program advisor may be called in by an ESCO, electrical Program Administrator contractor or electrician to advise them on the incentives available from Efficiency Maine. The program advisors will also work with the business 207-287-7327 owner or property manager to help them figure out what energy efficiency (I did not actually talk measures to undertake. It's up to the business owner or property manager with Linda, as she to hire an ESCO or electrical contractor to do the work. The business was on vacation, but was referred to her by owner or property manager then applies to Efficency Maine for reimbursement. Efficiency Maine encourages fluorescent lamp recycling, Richard Bacon and but there is nothing in the incentive program that requires it. The onus is Tim Clark below.) on the business owner, because they own the waste generated from a retrofit. By Maine law, large users (200 lamps or more at a time), must recycle them. The majority of electrical contractors and ESCOs know Richard Bacon about the law and include lamp recycling in the scope of work when they 207-287-8347 present a contract to the buildings owner. The retrofit is almost always a (residential energy turn key operation that includes lamp recycling. Tim Clark guessed that efficiency program) 90-95% of contractors will include lamp recycling in their bid to a potential customer. Some lamp suppliers take spent bulbs back also. When Tim Clark Efficiency Maine program advisors go out with a lamp manufacturing **Program Advisor** 207-623-3649 representative to talk with a potential customer, lamp recycling always comes up. Efficiency Maine does not have an approved list of ESCOs or electrical contractors. They advise businesses to look in the yellow pages, or check with other businesses. Usually a business owner will start with her own electrician. However, the Efficiency Maine website does have a list of "Participating Program Allies" on their website, which may include some electrical contractors and ESCOs. **Training Programs:** Efficiency Maine's training programs are listed on its website. Meetings of Energy Efficiency Program Managers: Efficiency Maine staff attends meetings convened by NEEP and Energy Star. No information obtained New Jersey's Clean **Energy Program** Robin Heston Universal Waste Coordinator NJ DEP

609-984-4643
robin.heston@dep.sta
te.nj.us
(After a number of
attempts to identify
someone at New
Jersey's Clean
Energy Program who
would answer my
questions, I called
Robin Heston, who
referred me to Mike
Winka (below) with
whom she had
worked in the past.)

Mike Winka
Director
Clean Energy
Program
609-777-3300
Neither a call to Mike
on 3/9/05 nor a
conversation with his
secretary, Regina
Sears, on 3/21
resulted in a call back
from Mike or anyone
on his staff.

Utilities

(Note: Parent companies are listed in parentheses.)

Energy New England Steve Grattan 508-698-0000

Energy New England is an energy cooperative formed to provide energy and energy-related services to the northeast public power community and related public entities.

Program Description: Energy New England does energy audits for public power customers and provides them with recommendations. Energy New England does not offer rebate programs. The recommendations do include a statement about the need to dispose of lamps properly. In response to my inquiry about whether Energy New England would be willing to include a of list lamp recyclers in their recommendations, Steve replied that he felt that this would be inappropriate for an organization representing government agencies. I did not ask Steve whether he'd be willing to include more specific information in the recommendation on lamp disposal requirements in

each state, but I think it would be worth posing this question to him. The businesses for whom Energy New England prepares recommendations hire their own electrical contractor. These businesses rely on the contractor to do the right thing regarding lamp disposal. Steve thinks that a lot of fluorescents go into dumpsters. He mentioned that electrical contractors have to pull permits at town and city halls for the lighting projects that they do. He suggests providing them with information about proper lamp disposal when they get a permit.

Meetings of Energy Efficiency Program Managers: Steve attends meetings convened by the investor-owned utilities such as NStar and National Grid.

Massachusetts Utilities

(Note: In addition to the investor-owned utilities listed below, there are forty municipal light departments in Massachusetts. Only two, in Braintree and North Attleborough, offer rebate programs. A full list of the electric utilities in Massachusetts can be found at http://www.mass.gov/doer/weblink/weblink.htm).

NStar Nelson Medieros 781-441-8703

Small Business Program: Approved vendors (presumably ESCO's or electrical contractors) market NStar's incentive programs to small commercial and industrial customers (<100KW/month). The vendors do free audits. If they identify energy savings that the facility could realize by replacing lighting for example, they offer the business an incentive of 80% of the cost of the replacement. If the business agrees, the vendor goes in and replaces the lighting. NStar contracts with Onyx to recycle the lamps and ballasts from these jobs. It's up to the vendor to coordinate with Onyx. The lamp replacement and recycling is a turn key operation from the point of view of the customer.

Large Business Program: NStar markets its incentive program to large customers and these business customers contact NStar when they have a project they want to carry out. Large business customers use their own contractor to do lighting work. The customer completes an application for the incentive and can check yes or no on the application to say whether they want to take advantage of lamp and ballast recycling offered by NStar. They usually take advantage of this option.

Massachusetts Electric Company (National Grid)

Ed Freeman 800-322-3223

Incentive Program: When businesses apply for the incentive program, they can request free lamp disposal. Mass Electric then has their lamp disposal contractor contact the business and arrange a pick up. Whether a business chooses the free lamp disposal option has no effect on whether they receive the incentive. Most businesses choose the free disposal option because the price is right and because if the business has hundreds of lamps, it's much

Western Massachusetts Electric (Northeast Utilities)

Kim Kiernan Manager, Small Business Program 413-785-5871 x 2275 413-787-9275 (cell)

Carl Santoro Manager, Municipal/Commercial/Indust rial Program, Springfield Area 413-787-9286

Tim Simmonds (Kim and Carl's boss – I did not get his title) P.O. Box 2010 West Springfield, MA 01090-2010 413-787-9326

1-800-322-3223

Company (National Grid)

Nantucket Electric

I did not contact this utility.

more convenient.

Small Business Incentive Program: Western Mass Electric issues an RFP each year for contractual services to carry out lighting retrofits. The utility employs eight electrical contractors. Western Mass Electric also contracts with a lamp recycler and pays for proper lamp disposal. The electrical contractors must get a receipt when lamps are recycled. Western Mass Electric audits the contractors' records once per year.

Municipal/Commercial/Industrial Program: In this program, targeted towards larger electricity users, the business customer applies for an incentive payment and carries out the lighting retrofit and manages lamp disposal on its own.

Opportunities for Collaboration: Tim Simmonds would be interested in including information on the municipal/commercial/industrial program incentive application regarding the dangers of mercury in the environment, Massachusetts rules for lamp disposal, and a list of lamp recyclers in New England

Meetings of Energy Efficiency Program Managers: Meetings are convened by NEEP and by the MA Division of Energy Resources. The NUP (Non-Utility Party) Coordinator also organizes occasional meetings of utility program administrators. KEMA Consulting is the NUP coordinator for all Massachusetts utilities. Contact Liz Hicks at 781-273-5700.

New Hampshire Utilities

Public Service of New Hampshire (Northeast Utilities)

Tom Belair 800-662-7764 **Small Business Incentive Program:** For business customers under 100KW/month, Public Service of New Hampshire hires an electrical contractor to do lighting retrofits. PSNH pays 50% of the cost of the lighting retrofit and the lamp and ballast recycling. The electrical contractor subcontracts lamp recycling to a lamp/ballast recycler from Massachusetts.

Large Business Incentive Program: It is up to larger business customers to hire their own ESCO or lighting/electrical contractor to do retrofits. The terms and conditions of the incentive payments made to large business customers make it the responsibility of the customer to dispose of lamps in an environmentally friendly manner. The rules for proper disposal of fluorescent lamps are posted on PSNH's website.

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One with Otata Electric	Training Programs: PSNH regularly holds lighting seminars for different business sectors in the state. Opportunities for Collaboration: Tom indicated that he would be willing to incorporate more specific information on New Hampshire's laws regarding lamp disposal into the terms and conditions for incentive payments for large business customers. He also expressed interest in incorporating information of this sort into lighting seminars for businesses. Meetings of Energy Efficiency Program Managers: The New Hampshire Public Utilities Commission and some interveners convene quarterly meetings of energy efficiency program managers. Tom also meets with program managers from the other utilities in the state on a monthly basis. The responsibility for convening these meetings rotates among the utilities. Tom suggested that these meetings would be good opportunities to present information on lamp recycling to program managers.
Granite State Electric	No commercial lighting retrofit programs exist at this time.
Now Hampshire Floatric	NH Floatric Coop has and ESCO under contract for angre:
New Hampshire Electric Coop Phil Vecchio 800-698-2007	NH Electric Coop has one ESCO under contract for energy efficiency work. This ESCO subcontracts lighting retrofits to electrical contractors. NH Electric Coop pays for both lighting retrofits and lamp recycling for business customers. NH Electric Coop contracts with Global for lamp recycling. The ESCO or electrical contractor makes arrangements with Global for lamp pick ups. Phil gets notification from Global that the lamps they have picked up under contract to NH Electric Coop have been recycled. Meetings of Energy Efficiency Program Managers: The Public Utilities Commission in NH requires utilities to meet regularly. These meetings are arranged by various representatives from the utilities.
Unitil Energy Systems Ed Mailloux 603-773-6541	Small Commercial Customers: The ESCO or electrical contractor working for a small commercial customer hires a lamp/ballast recycler, and then sends the bill of lading for the recycled lamps to Unitil. Unitil pays for the recycling. Large Commercial Customers: Lamp recycling is the financial and logistical responsibility of large commercial customers. A customer would typically require their ESCO to remove the lamps, because there would be so many of them. However, there is nothing on the rebate application for large commercial customers that alerts them to New Hampshire's lamp recycling requirements. Ed was not willing to include this information on the rebate application, saying that it was not Unitil's responsibility. Ed suggested incorporating information about lamp disposal requirements into the local or state level licensing process for

electrical contractors.

New York Utilities

(Note: In New York state, the New York Power Authority, the Long Island Power Authority and municipal utilities administer their own energy efficiency programs. The remaining utilities do not administer their own programs. Instead, they pay into a fund that supports the programs operated by NYSERDA. A full list of electric utilities regulated by the New York Public Utilities Commission, including the municipal utilities, can be found at http://www.dps.state.ny.us/electricu.html)

New York Power Authority Patricia Meehan Senior Environmental Engineer 914-681-6200 914-392-8220

NYPA is a state owned power organization that sells power to government agencies; to community-owned electric systems and rural electric cooperatives; to private companies, to private utilities for resale – without profit – to their customers; and to neighboring states, under federal requirements.

Program Description: NYPA provides high efficiency lighting for school districts, hospitals, and state offices. NYPA provides full funding up front for the lighting and then the customer pays NYPA back over time. NYPA has a contract with a mercury recycling facility. NYPA's electricians are trained to put spent bulbs in containers. The recycler then does a milk run every two weeks to the sites that NYPA directs them to.

Meetings of Energy Efficiency Program Managers: NYPA collaborates with NYSERDA on meetings.

Long Island Power Authority

Sharon Laudisi 516-222-7700 516-318-6151 (cell) slaudisi@lipower.org

Numerous calls and emails yielded no response.

No information.

Connecticut Utilities

Connecticut Light and Power (Northeast Utilities)

Randy Magnini Manager Small Business Incentive Program 800-286-5000 vagnirg@nu.com

Connecticut Light and Power

Dave Hayward 860-665-4660

Small Business Incentive Program: Connecticut Light and Power (CL&P) has a pre-qualifying process for electrical contractors, who may then use CL&P funding to provide incentives to business customers for lighting retrofit projects. Contractors have to certify that they have a contract with a lamp recycler in order to be pre-qualified. These contractors go out and drum up business and promote the utility's incentive programs. CL&P allows these contractors to charge the customer a certain amount of money for lamp/ballast disposal. The customer pays this lamp recycling charge through financing or outright to the contractor. 75% of customers use this option because the contractor is then responsible for getting rid of the old lamps. Some customers feel they can get a better deal from their trash hauler, so they arrange

disposal that way.

There are 15 other energy efficiency programs at Connecticut Light and Power, all set up slightly differently. Dave Dobratz (860-832-4804) manages the large business program. I did not have a chance to speak with him.

Training Programs: CL&P holds an annual training for their approved contractors.

Opportunities for Collaboration: Randy would be interested in having someone speak about lamp recycling at their annual contractor training.

United Illuminating Company

Roy Haller 203-499-2025

Small Business Program: A dozen or so vendors are approved to work in this turn-key program doing energy efficiency projects. The vendors work for UI, and UI pays the vendors when the work is done. Roy said that UI holds these vendors responsible for proper lamp disposal, which must be carried out according to state laws and regulations. If the lamps are not handled properly, Roy said that in all likelihood, that vendor would be expelled from the program. Alternatively, UI might change the agreement with that particular vendor to shift responsibility for lamp disposal to another person within the vendor company. In addition, Roy said that such an incident would prompt UI to re-examine their agreements with vendors. In fact, Roy was not sure that UI's vendor agreements contain the most up-to-date lamp recycling requirements. When I mentioned that all lamps in CT have to be recycled or handled as hazardous waste, Roy mentioned that that was a change as far as he was concerned.

Major Retrofit Program: In this program for large businesses, the vendors are not under contract to UI. The incentive for the energy efficiency work goes directly to the customer and the customer is required to handle spent lamps properly. Roy said, "Hopefully, the business customers require their vendors to do the right thing."

Opportunities for Collaboration: Roy was open to receiving upto-date information on CT regulations governing lamp disposal that could be incorporated into agreements with vendors.

Connecticut Municipal Electric Coop

Gabe Stern
Director of Planning and
Project Development
30 Stott Ave

Program Description: The Connecticut Municipal Electric Coop consists of six member utilities in CT. When a business customer requests an audit from a member utility, CMEC conducts the audit, makes recommendations and then helps the customer identify a contractor and get a good deal.

Norwich, CT 06360 gstern@cmeec.org 860-889-4088	Opportunities for Collaboration: Gabe has no idea what happens to spent lamps when lighting retrofits are done as a result of audits conducted by CMEC, but realizes that proper disposal is important. He is aware of the mercury issue and would welcome help in getting the word out. He mentioned that they are going to be doing a big lighting retrofit campaign and would like to do it right. Meetings of Energy Efficiency Program Managers: Gabe attends meetings convened by the state of CT Clean Energy Fund,
	the New England Public Power Association and the American Public Power Association.
LevCo Tech Inc . 203-324-5500	Does not provide energy efficiency services.

Rhode Island Utilities

(Note: It appears from the Rhode Island Public Utilities Commission website (http://www.ripuc.org/utilityinfo/electric.html) that these are the only electric utilities operating in Rhode Island. However, a call to the Commission to confirm this was not returned.

Narragansett Electric
(National Grid)
Cameron Crawford
Rise Engineering
800-332-3333

Rise Engineering is an ESCO under contract to Narragansett Electric. Rise has a division that does work for utilities, and a division that works for businesses directly.

Program Description: Rise Engineering does audits for Narragansett Electric business customers. If they identify opportunities where the potential for saving energy is great enough, Rise will go ahead and do the work. They have an extensive staff of licensed electricians and they subcontract some work out to electrical contractors. When Rise delivers the lamps to be installed at a site, they also send out packing for the old lamps and ballasts. When the old lamps are ready to be picked up, Rise notifies their hazardous waste hauler/recycler. The hauler provides Rise with a bill of lading and certificate of proper disposal.

Pascoag Electric 800-772-4242

This phone number is for an energy advisor. I was unable to reach anyone.

No information obtained.

Energy Service Companies (ESCOs)

Note: There is a professional organization for ESCOs, the National Association of Energy Service Companies, through which I identified the two ESCOs that I spoke with: Select Energy Services, Inc. and Conservation Services Group.

National Association of Energy Service Companies (NAESCO)

1615 M. Street, NW, Suite 800

According to their website, NAESCO promulgates industry best practices; educates end users and policy makers that the implementation of cost effective energy efficiency and demand reduction technologies creates tangible economic value; provides a forum for the introduction of new technologies for the industry;

Washington, DC 20036 202-822-0950 http://www.naesco.org/ advocates sound legislative and regulatory policies at both the federal and state levels to promote the cost-effective delivery of comprehensive energy services and maintains close contact with the membership to communicate updates on the issues facing the industry.

Select Energy Services, Inc.

Natick, MA Doug Gustason 800-325-4432 Select Energy Services, Inc. (SESI) offers comprehensive energy efficiency, engineering, design, installation, and maintenance services to a wide range of government and private-sector clients.

Who actually goes in and changes out the lights? Select Energy Services subcontracts with electrical contractors to do this work.

Do you recycle lamps when you do a change out? If so, why? SESI, on its own initiative, does recycle lamps from the lighting projects that it carries out. Select Energy Services has their lamp recycler provide corrugated drums to the work site. The electrical contractor is instructed to put the old lamps in the drums. SESI then receives paper work from the recycler showing that the lamps have been recycled.

SESI has done work for the New York Power Authority for many years. In the early days, NYPA required lamps to be recycled. "We have followed their lead," said Doug Gustason. "NYPA conducted trainings for ESCOs and now everybody knows that fluorescent lamps should be recycled." SESI includes lamp recycling in the recommendations it develops for clients following an energy audit. Doug mentioned that public entities, in particular want to make sure that everything is done right.

Doug mentioned that most conversions from incandescent to fluorescent lamps were done years ago. Occasionally SESI will identify a section of a building that had been overlooked. For the most part, however, SESI is now focusing on other energy efficiency measures.

There is another type of service provider that regularly changes out lamps, though. Lighting and maintenance contractors do "major retrofits" as he called them, for facilities like office buildings and malls. Every 1½ years or so, all the lamps are replaced, whether they are burnt out or not. This is done in some facilities because the labor costs are lower than for replacing each lamp as it burns out. Doug wasn't sure if these types of contractors routinely recycle the lamps they replace. Reviewing publications in which lighting and maintenance contractors often advertise, such as Energy User News, may be a way to identify them.

Conservation Services Group

Westborough, MA Chris Davis Program Administrator 508-836-9500 Chris.davis@csgrp.com Do you employ a specifier or subcontract to someone who does that work for you? SESI has someone on staff who specifies what lighting should be purchased by the client. This information is included in the recommendation provided to the client.

Conservation Services Group (CSG) does energy efficiency work for colleges, property management companies, parking garages, and other private and public sector clients.

Do you recycle fluorescent lamps and if so, why?

Yes. CSG's commitment to lamp recycling arises from its mission to protect the environment.

Who actually goes in and changes out the lamps?

After CSG engineers perform an energy audit and prepare recommendations for a client, CSG uses electrical contractors to do lighting work for them. Sometimes CSG will use its lamp recycling contractor, Onyx, on a project, and sometimes CSG's electrical contractor will use their lamp recycler. If there are utility rebates involved in a project, the utility may take care of lamp disposal.

Do you employ a specifier or subcontract to someone who does that work for you? Someone on CSG's staff specifies and buys the lights for the client.

Prepared for NEWMOA by: Jan Aceti Aceti Associates Arlington, MA 781-646-4593 jan@acetiassociates.com

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