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Emma Stamas
Box 12
Colrain, MA 01340
Feb. 12, 2007

Dear Sirs:

This letter is a complaint to the NRC that the Vermont Yankee Nuclear Station in Vernon, VT has been negligent and misleading in their GEIS Supplement 30. I have attached 4 pieces of specific information that explain how much potential exists for the development of 200 to 600 MW of NEW hydro, methane, wind, and solar produced power into the grid in the region within 100 miles of Vernon, VT over the next 5 years. The statements made in the GEIS Supplement 30 about hydro & wind potential for development are false and totally undocumented with local facts. There is also a very real push to conserve energy in this region. Massachusetts has several programs for residents and municipalities that are encouraging and supplying grant money to do all kinds of projects from replacing lights with compact fluorescents, to insulating & weatherstripping, to adding solar hot water units, to generating electricity with methane produced on the dairy farms in this region and from wood and other biomass. None of these projects were even considered or mentioned in the GEIS Supplement. Some of these savings are small but added together, there are significant energy savings. Small energy production projects that produced .25MW from methane on a dairy farm

such as Blue Spruce Farm in Bridgeport, VT) seem small, but if 100 farms were to do similar projects, 25 MW would be produced. Five "new" hydropower projects using existing small dams on the North River or Deerfield River could produce 20 to 40 MW each or a total of 100 to 200 MW of power that could be quickly adjusted according to demand. Two new wind projects of 12 new 2 MW turbines each are proposed in Florida, MA and Searsburg, VT. These projects could produce about 40 MW of power or more. Add these together and there is a total of 150 to 300 MW of NEW power potential in just these proposed projects alone! These facts were omitted from the GEIS Supplement and deserve to be considered by the NRC before granting any license renewal for the Vermont Yankee Nuclear Station.

The scientists at Argonne National Labs did not appear to spend any time actually researching any of the projects that groups such as CET, NESEA, Co-op Power, and smaller environmental groups have proposed. National Energy & Gas Transmission, Inc. and windpower companies were also left out of the GEIS. If they did any research about clean, safe, alternative energy in the Vernon, VT region, they left that information out of their report and their resulting conclusions are misleading and false. The jobs that could be created by many small hydro and methane and wind projects would be significant for our region as well.

Decommissioning the Vermont Yankee Nuclear Facility before any serious or minor leakages or cracks occur would provide more local jobs than running the plant because local, non-college educated workers could be hired and paid more than minimum wage. If decommissioning is postponed more than 10 yrs, the Entergy company could become bankrupt if any of their many aging plants have a serious operational problem or terrorist attack or expensive repairs to make while other energy alternatives get built and start producing power at more economical rates over the long run. The statement on p. 8-2 of Draft NUREG-1437, Supplement 30, Dec. 2006 says, "The impacts of decommissioning after 60 yrs of operation are not expected to be significantly different from those that would occur after 40 years of operation." What kind of an analytical, scientific, fact based statement is that? No documentation or facts are given to explain this statement which sounds more like a child's wish than a scientific analysis of reality! I urge the NRC to refuse to renew Vermont Yankee's license, so that the citizens of this region can work hard to conserve 200 MW of energy each year and produce 400 MW of clean & SAFE energy over the next 5 yrs instead!

Thank you, Emma Stamus

www.leg.state.vt.us/STATUTES/FULLCHAPTER.CFM
www.leg.state.vt.us/statutes/Fullchapter.cfm

The Vermont Statutes Online
Title 30: Public Service
Chapter 90: VERMONT HYDRO-ELECTRIC POWER AUTHORITY

TITLE 30
Public Service
PART III
Utility Companies
CHAPTER 90. VERMONT HYDRO-ELECTRIC POWER AUTHORITY

§ 8051. Findings, purpose, and goals

(a) The general assembly of the state of Vermont finds:

(1) Potential exists to purchase an interest in hydroelectric power stations along the Connecticut and Deerfield Rivers located in Vermont, New Hampshire, and Massachusetts.

(2) The general assembly created the Vermont Renewable Power Supply Acquisition Authority (VRPSAA) in Sec. 38 of No. 63 of the Acts of 2003 to investigate such a purchase and the VRPSAA has taken actions towards that goal.

(b) Therefore, it is the purpose of this chapter to create an entity with the authority to finance, purchase, own, operate, or manage any interest in the hydroelectric power facilities along the Connecticut and Deerfield Rivers located in Vermont, New Hampshire and Massachusetts, and to sell the electric energy under the control of the authority from those facilities at wholesale to authorized wholesale purchasers. The purchase and operation of an interest shall be pursued with the following goals:

(1) To promote the general good of the state;

(2) To stimulate the development of the Vermont economy;

(3) To increase the degree to which Vermont's energy needs are met through environmentally-sound sustainable and renewable in-state energy sources;

(4) To lessen electricity price risk and volatility for Vermont ratepayers and increase system reliability;

(5) Not to compete with Vermont utilities; *

(6) To ensure that the credit rating of the state will not be adversely affected and Vermont taxpayers will not be liable should the project fail because of the failure to produce sufficient revenue to service the debt, the failure of a partner, or for any other reason; and

(7) To cause the project to be operated in an environmentally sound manner consistent with federal licenses and purposes. (Added 2003, No. 121 (Adj. Sess.), § 101, eff. June 8, 2004.)

* this is direct evidence that your GEIS statements about the ~~[illegible]~~ small potential for future development of hydropower in the Vernon, VT region, are misleading and NOT based on facts. the only thing holding back hydropower development in this region is the Vermont Yankee Nuclear Facility itself because hydropower would "compete" with that power utility company unless it is closed in the near future.

Why was this information totally excluded from the GEIS Supplement 3 alternative energy and energy conservation section?

Clean Energy Plan for the Pioneer Valley

Plan Summary

As part of Massachusetts' electric utility restructuring legislation in 1997, the state passed several new policy programs which require a small, but increasing, amount of electricity sold to Massachusetts customers to come from new, qualified renewable energy sources. These renewable energy sources are defined as solar photovoltaic, wind energy, landfill methane gas, biomass, and fuel cells using a renewable fuel.

Beginning in the fall of 2005, the Pioneer Valley Planning Commission (PVPC) and the Franklin Regional Council of Governments (FRCOG) have been working with the Pioneer Valley Renewable Energy Collaborative and vast public input to develop a regional strategic plan for clean energy with funding from the Massachusetts Technology Collaborative. The purpose of this two-year project is to develop a community-based, yet regional, strategic plan to implement shared goals (the following are draft goals):

- Create new clean energy in the range of 75-100 MW /year in the Pioneer Valley (Franklin, Hampshire, and Hampden counties) by 2010; Over 5yrs: 75 x 5 = 375 MW minimum increase
- Increase energy efficiency across the board on the order of reducing year 2000 energy demand by 100-200 MW/year; and, Over 5yrs this would be 100 x 5 = 500 MW ~~/year~~ minimum in 5 yrs.
- Create jobs associated with clean energy technologies.

Our Clean Energy Planning Process involves the following:

- Update an inventory of renewable energy (RE) activities and efforts in the Pioneer Valley;
- Create, administer, and compile the results from a public Web-based RE opinion survey;
- Create, administer, and compile the results from a survey of municipal officials in 69 cities and towns;
- Create, administer, and compile the results of a detailed SWOT (strengths, weaknesses, opportunities, and threats) analysis surveying 30 regional stakeholders including municipal officials, business owners, environmentalists, RE experts, and RE advocates;

During Clean Energy Month October 2006:

- Nine Clean Energy Education Sessions on topics ranging from small-scale biomass to energy audits;
- Four weeks of on-line discussions to develop consensus on goals, guiding principles, selection criteria, strategies, and an implementation plan; and
- 3 Strategic Planning Sessions in October to confirm on-line work.

In the spring of 2007, as each of the Plan partners begins to implement the strategies, PVPC and FRCOG will be inviting all 69 cities and towns* in the region* to endorse the Clean Energy Plan in principle and to commit to pursuing a few specific activities. PVPC and FRCOG will also apply to MTC and work with other supporters to secure funding to implement recommendations of the Plan.

*Note: This report is about the region from 10 to 50 miles to the south of Vermont Yankee Nuclear Station. This is the region that uses much of the power currently generated there AND it is the region that shares the electricity "grid" with all other consumers of electricity that use Vermont Yankee's power. Over 5yrs. this region would be able to do without 800 MW/year of power or even more than this amount to make up for any unexpected growth or problems meeting goals. Vermont Yankee could close down in 2012

1 MR. SACHS: Well, I'm gonna briefly
2 respond to the woman from the Vermont Business
3 Partnership who spoke earlier and mentioned the
4 Department of Public Service, and how they said how
5 much money we would lose if Vermont Yankee were to
6 close.
7 So let's take Commissioner David O'Brien
8 who's the head of the state department of Public
9 Service. He put a $60 million figure on the cost that
10 would come to Vermont ratepayers if VY closed in 2008.
11 Vermont Yankee provides roughly 250 megawatts to
12 Vermont. That represents one-third of our Vermont
13 total energy demand, which is about 750 megawatts.
14 A recent PSB study determined that energy
15 efficiency measures could reduce Vermont's total
16 electricity use by 20 percent, or 150 megawatts.
17 Let's apply that savings to what VY provides. Then
18 we'd reduce the amount of power needed to replace VY
19 to 100 megawatts. That's 250 minus 150.
20 If it would cost Vermont 60 million bucks
21 to replace the 250 megawatts over four years, it would
22 cost us 40 percent of that or $24 million to replace
23 the 100 megawatts that would remain, if we implemented
24 all the efficiency measures we could.
25 Now we're down to $24 million. Spread

1 that over four years. That's $6 million a year,
2 divided by 250,000 households in Vermont, and the
3 increase in each household's electricity bill for the
4 entire year would be roughly $24.00. That's not even
5 considering the contribution from industrial and
6 commercial users.
7 That doesn't sound like a lot of money to
8 invest in freeing Vermont from this role in the
9 production of hundreds of tons and millions, hundreds
10 of tons of radioactive waste, millions of curies of
11 deadly nuclear substances created by the Vermont
12 Yankee nuclear reactor, stored on the banks of the
13 Connecticut River. It doesn't sound like a lotta
14 money to spend to get rid of Vermont Yankee.
15 Now I'm gonna repeat what I said earlier
16 today for the few of you who are left in this
17 evening's event. Richard Monson, Harvard School of
18 Public Health, stated: "The scientific research base
19 shows that there is no threshold below which low
20 levels of ionizing radiation can be demonstrated to be
21 harmless or beneficial."
22 There is no threshold below which low
23 levels of ionizing radiation can be demonstrated to be
24 harmless or beneficial. The health risks,
25 particularly the development of solid cancers in

1 organs, rise proportionally with exposure.

2 At low doses of radiation, the risk of

3 inducing solid cancers is very small. Low doses. It

4 sounds like what the NRC was giving me earlier in

5 tonight's case.

6 As the overall lifetime exposure

7 increases, so does the risk. Every nuclear reactor

8 emits small amounts of radiation, even so-called zero

9 emission reactors.

10 3-29-2004 was two days before the NRC

11 arrived in Vernon, when they came to inform us that

12 they would not be performing the independent

13 engineering assessment which had been considered a

14 requirement on the proposed uprate by the Vermont

15 Public Service Board, the state's regulatory body.

16 5-4 of 04, the NRC changed its tune and

17 announced that it had long been planning such an

18 independent engineering assessment. They must have

19 been planning it since at least March 15th.

20 You, the NRC, say that Three Mile Island

21 was a wake-up call for the industry. That was March

22 28th, 1979. That is the same year the NRC publicly

23 stated there was no such thing as a safe amount of

24 radiation.

25 Since 1979, these are some of the events.

1 February 11th, 1981, Tennessee Valley

2 Authority's Sequoia One Plant in Tennessee, a rookie

3 operator caused a 110,000 gallon radioactive coolant

4 release.

5 February 25th 1982. The Ginna Plant near

6 Rochester, New York. Its steam generator pipe broke,

7 15,000 gallons of radioactive coolant spilled, small

8 amounts of radioactive steam escaped into the air.

9 January 15th and 16th, 1983, the Browns

10 Ferry Station, nearly 208,000 gallons of low-level

11 radioactive contaminated water was accidentally dumped

12 into the Tennessee River.

13 1981, 1982, and 1983, Salem One and Two in

14 New Jersey, 90 seconds from catastrophe when the plant

15 was shut down manually, after the failure of an

16 automatic shutdown system. A 3000 gallon radioactive

17 water leak in June of '81, a 23,000 gallon leak of

18 mildly radioactive water, which did splash on to 16

19 workers in February of '82, and radioactive gas leaks

20 in March of '81 and September of '82.

21 Let's go to 1996. NRC Chairperson Shirley

22 Jackson, speaking of Millstone in Time magazine.

23 Quote. "Clearly the NRC dropped the ball. We won't

24 do it again." End quote.

25 1997. Yankee Row, 20 miles from here,

1 roughly, out west, was closed. It's in Rome,
2 Massachusetts. The NRC had allowed Yankee Row to dump
3 radiation, for about 30 years, into the Deerfield
4 River.
5 February 15th, 2000, New York's Indian
6 Point Two, aging steam generator rupture, venting
7 radioactive steam. The NRC initially reported no
8 radioactive material to have been released. Later,
9 they changed their report to say that there was a
10 leak, oh, yes, but not enough to threaten public
11 safety.
12 2004. New NRC Chairman Nils Diaz, about
13 Davis Besse, said--catch this--"The agency," quote,
14 unquote, "dropped the ball," end quote. Again. Hmm.
15 I thought you said it wouldn't happen again. I guess
16 it did. Accidents do happen. That's our NRC.
17 If Three Mile Island was a wake-up call,
18 what exactly was happening at Davis Besse? I do, I
19 would like to know that. Oh, so here we are in an NRC
20 meeting. The environmental impact of Vermont Yankee.
21 We have virtually an ineffective evacuation plan,
22 untested in its entirety. What about those people
23 without vehicles? What about day care centers and all
24 the schools together? What about the transient hotel
25 guests?

1 A worst-case scenario accident at VY would
2 lead to an area the size of western Mass., Vermont,
3 and New Hampshire being uninhabitable for possibly 30
4 years or more.
5 The plumes, from the National Oceanic and
6 Atmospheric Administration, shows plumes going as far
7 north as deep into Canada. That's over Montpelier.
8 As far south as deep into North Carolina and as far
9 east as over Cape Cod, into the ocean.
10 Then in 2001, on top of that, there's
11 this, something called an Operational Safety Response
12 Evaluation. This was just a test--Operational Safety
13 Response Evaluation test. It occurred about a month
14 before 9/11. In this test, the NRC would stage mock
15 attackers to test the security of nuclear reactors.
16 They came up here to Vermont Yankee and they let the
17 security system at VY know where the people would be
18 attacking from, when they'd be attacking.
19 But that of course is to make sure that if
20 there were some real attacks at the same time, the
21 security agents would know. That's not what they
22 said. So they knew the whereabouts of where these
23 attackers were coming from.
24 And the test was to make sure that the
25 attackers could not get into the control room.

Obviously, stop them at the fence line would be the logical thing to do.

Vermont Yankee failed. Oh, I'm sorry. The NRC doesn't use that word. I think there's some jargonistic terminology, I can't get my grip around. They certainly had a low security rating on that one.

So the mock attackers were able to enter the control room, and VY, one of the least secure nuclear stations in the country--notoriety.

Around Vermont Yankee, numerous engineers looked at me and said after 9/11, we fortified our security, we invested $8 million into our security system. Well, here's a question for an environmental impact. Has anybody, any other reactors invested after 9/11? Did everybody have to invest $8 million? And if that is the case, let's say that's a given--if everybody's adding $8 million to their security systems but yet VY was already behind the eight ball, where does that put us today?

I think we're still behind the eight ball because we saw the same amount invested.

I wonder if the fact that there have been no legislators to speak here tonight, speaks to the futility of this event.

MR. LUKENS: Good evening. My name's

Larry Lukens. I live in Vernon, in the emergency planning zone, and I work at Vermont Yankee. We've heard a lot tonight, there've been a lot of really eloquent speakers. I'm not going to try to match that.

This is about the scoping for the environmental review, as I understand it, and we've heard a lot of things that weren't really about the environment. One of the tests says, I recall from the slide, is that NRC has to look at environmental effects and determine whether these environmental effects constitute a new and significant change in things that have already been evaluated.

I haven't heard anything tonight that says there's anything new and significant. Actually, I haven't heard anything new, and I haven't heard anything that sounds significant.

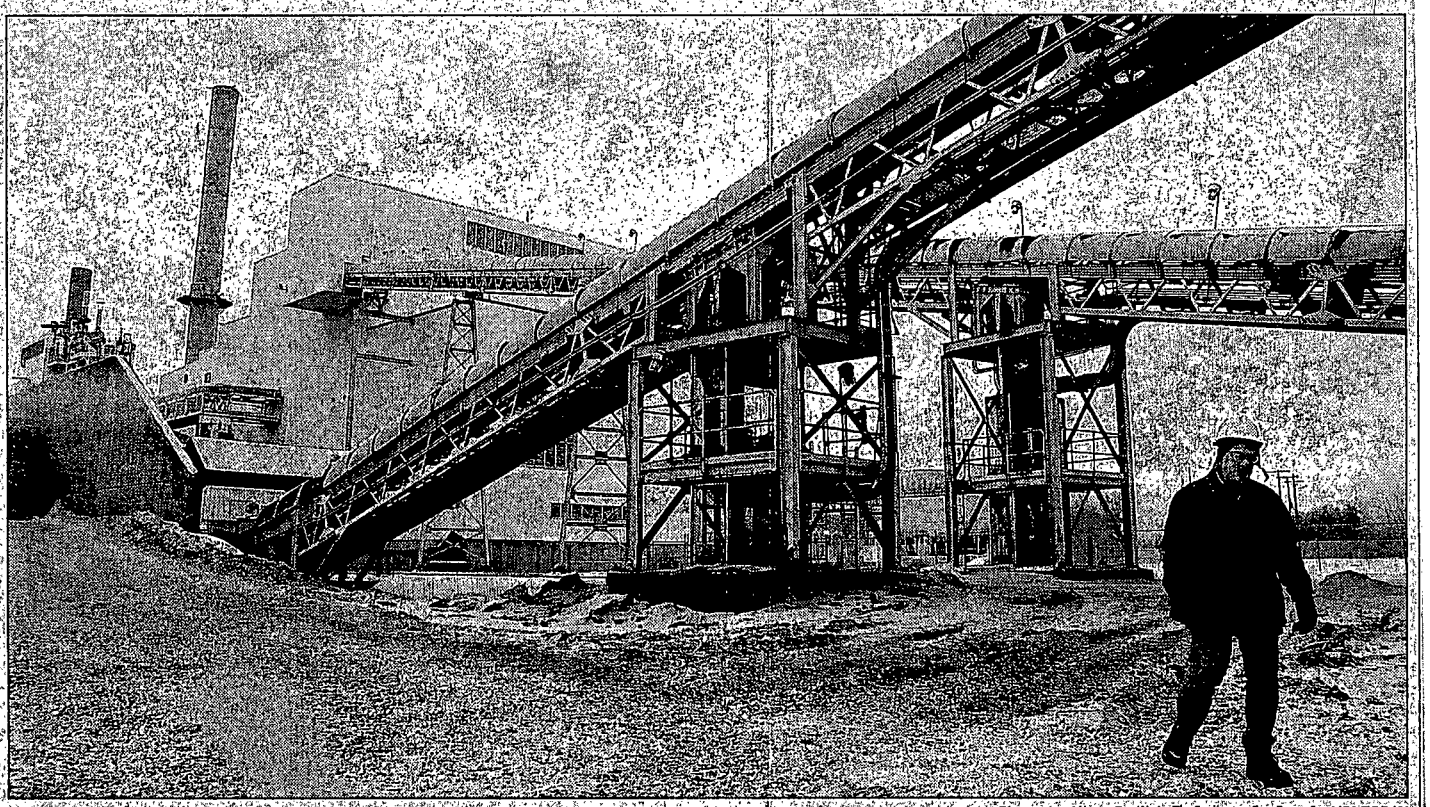
We have met all the requirements. We have exceeded many of them. We continue to meet the environmental requirements. We continue to be, as John Dreyfus said, good stewards of our environment. This plant emits no carbon dioxide. In fact it emits nothing that would be considered a hazard. We don't emit radioactivity.

And the people who have spoken tonight

Biomass plants find power in poop

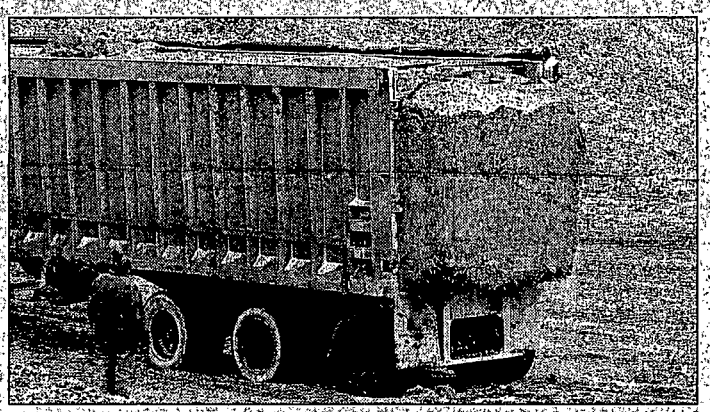
Alternative energy sources surge toward comeback

By Paul Davidson
USA TODAY



Photos by Alison Redlich, *The Burlington Free Press*, for USA TODAY

Bark power: Bill Kropelin, chief forester for the Burlington Electric Department, walks through the McNeil Plant in Burlington, Vt. Below, driver Dennis Bathlon empties his truck of 25 tons of bark at the Burlington plant. The load of bark can power the plant for 25 minutes.



Here's the stuff of America's energy future: wood trimmings, cow manure, chicken litter, household trash and landfill gas.

Debris is becoming a hot commodity in some areas as the U.S. power industry seeks to lessen its dependence on fossil fuels amid growing global-warming concerns.

With renewable energy taking off, wind and solar power are hogging the limelight, but biomass-fired electricity is quietly making a comeback after a decade-long slump. Biomass is animal and plant wastes used as a fuel source.

In his State of the Union address, President Bush cited the need for biomass as a gasoline substitute. Yet 80% of biomass is now used for electricity and heat, says the Center for Renewable Energy.

Biomass plants burn the organic refuse to produce steam that turns generators. They already represent 1% of U.S. electricity capacity and 11% of renewables, says Cambridge Energy Research Associates. Biopower thus rivals wind and dwarfs other emerging renewables, such as solar and geothermal. Yet while wind power has been growing about 30% a year, biopower has been stagnant. Projects in development, though, would boost capacity 14% by 2009, CERA says. "They're starting to percolate," says CERA analyst Brandon Owens.

Wood-fired energy producers, which round up leftover, low-grade wood from loggers and saw and pulp mills, make up about 60% of the industry. Municipal solid waste, landfill gas, animal waste and agricultural waste constitute the rest.

Biopower took off in the 1980s, sparked by a federal law that encouraged small renewable energy projects. But since natural gas prices fell in the 1990s, biopower has struggled. It's rebounding thanks to rising natural gas prices and the prospect that Congress will cap carbon dioxide emissions from fossil-fuel plants to curb global warming. Wood and other organic matter emit carbon when burned, but they'd release the same amount if allowed to decay, and maybe more harmful methane if buried in a landfill. Biopower's advantage over wind, meanwhile, is that it runs nearly constantly.

"You're getting (power) pretty much 'round the clock and reliably," says Hal La Flash, renewable energy director for Pacific Gas & Electric in California, which gets 5% of its electricity from biomass.

Biopower also provides social benefits, such as disposal of animal wastes that otherwise would pollute groundwater, says Scott Sklar, former head of the defunct National BioEnergy Industries Association.

Hurdles for biopower

Yet biopower faces challenges. A pound of wood chips or household trash, for instance, yields a third to half the energy of the same amount of coal. That raises fuel costs so sharply that producers must scrape together their detritus from within a 75-mile radius to avoid high transportation expenses. That, in turn, limits supply. Capacity of an average plant is 20 megawatts, making it far less cost-efficient than a typical 500-megawatt coal plant. Most biomass plants are run by small producers that sell their power to utilities. The cost to produce electricity from biomass is about 25% more than wind and 90% more than coal, Owens says.

Uncertain supplies are another issue. In Burlington, Vt., a wood-fired plant has been running at 60% capacity, partly because machinery can't be rolled into muddy forests.

The industry, though, is blossoming as it eyes fresh revenue. Twenty-three states make utilities meet quotas that require them to mix their purchases of traditional power sources, such as coal, with certain amounts of alternative energy.

So besides selling the biopower itself, producers can peddle a state "renewable energy credit" (REC) for each megawatt hour generated. That and a small federal tax credit are encouraging bigger plants.

Public Service of New Hampshire recently spent $75 million to convert a 50-megawatt coal generator to a similar-size wood-fired plant. But the cost will be more than offset in just a few years by the $15 million a year the company will earn from REC sales to Massachusetts utilities, says generator manager Richard Despins. The unit, which started up last month, also helps meet new state pollution limits and supports timber-industry jobs that will pump $20 million into the local economy, he says.

In South Point, Ohio, Biomass Group plans to start up a 200-megawatt wood-fired plant, the largest ever, in 2009. "We're the only (wood biomass) facility ... in a predominantly coal region," says lead investor Mark Harris. That, he says, will allow the company to build a "utility-scale" project that sells power to Eastern states with high electric rates.

Other biomass fuels:

▸ **Municipal solid waste.** The nation's 89 waste-to-energy plants produce enough electricity for 2.3 million homes by burning household trash, most of which is organic. About a dozen new facilities are proposed. With Frederick County, Md., paying $57 a ton to send its trash to out-of-state landfills and power prices soaring, building a waste-to-energy plant would save money in just a few years, says Michael Marschner, county utilities director.

▸ **Landfill gas.** About 300 U.S. power plants capture methane spewed by a nearby landfill's decaying organic matter and use it as natural-gas-like fuel. That cuts potential methane pollution. With natural gas prices high, Waste Management is building 10 plants a year at its landfills, 76 of which already have generators.

▸ **Animal waste.** Anaerobic digesters are oxygen-deprived tanks that break down cow manure into methane, that's sent to power plants or pumped through natural-gas pipelines. Environmental Power (EP) operates digesters at three dairies in Wisconsin and plans four more in Texas and six in California. PG&E is set to buy enough gas from EP to power 50,000 homes.

"It really reduces the odor (and methane emissions) of the manure and ... it's another income stream," says Lee Jensen, an Elk Mound, Wis., dairy farmer. He and his partners own a digester that generates about $360,000 a year in gas sales to a small utility.

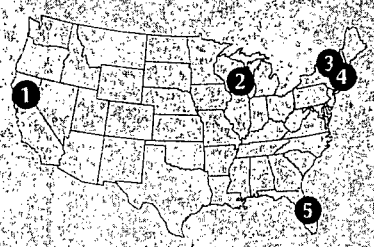
▸ **Agricultural wastes.** Fibrowatt is starting up a Benson, Minn., power plant large enough to serve 60,000 homes. It will burn turkey manure, along with sunflower shells, wood shavings and leftover corn stalks. The company will pay just $2 per ton of manure to state turkey growers. By collecting the manure and related materials daily, Fibrowatt says it's helping turkey growers, who otherwise sell the waste to farmers as fertilizer.

Most big utilities haven't built biomass plants due to costs, but some are "co-firing" small amounts of biomass in coal plants. At a Gadsden, Ala., coal plant, switchgrass makes up 5% of Southern Co.'s fuel. The utility is weighing similar setups for eight additional plants.

"We have a lot of growth in the Southeast, and we want to meet that growth in a way ... that's environmentally-friendly," says Leonard Haynes, who heads the company's renewables program.

Recycling waste to make electricity

These five plants each burn a different kind of biomass to produce varying amounts of electricity, measured in megawatts. One megawatt will power about 1,100 homes, but that can vary by season, location, household size and electricity usage.



	Agriculture waste	Landfill gas	Cow manure	Wood	Municipal waste
Plant	1. Wadham Energy	2. Omega Hills Landfill	3. Blue Spruce Farm	4. Schiller Station	5. Wheelabrator North Broward
Location	Williams, Calif.	Menomonee Falls, Wis.	Bridport, Vt.	Portsmouth, N.H.	Pompano Beach, Fla.
What it does	Burns rice hulls	Burns methane gas from landfill	Burns methane from cow manure	Converted boiler burns leftover wood from forestry clearings	Burns municipal solid waste
Production	26.5 megawatts	10 megawatts	0.25 megawatts	50 megawatts	68 megawatts
Enough for	32,000 homes	5,000 homes	350 homes	40,000 homes	55,000 homes
In operation	17 years	22 years	Two years	Two months	16 years
Burned per year	200,000 tons	2.2 billion cubic feet	36.8 million cubic feet	500,000 tons	780,000 tons
	Source: Enpower	Source: Waste Management	Source: Central Vermont Public Service	Source: Public Service of New Hampshire	Source: Waste Management