Agricultural Law Update

VOLUME 24, NUMBER 11, WHOLE NUMBER 288 NOVEMBER 2007

AALA
American Agricultural Law Association

INSIDE

Solicitation of articles: All AALA members are invited to submit articles to the Update. Please include copies of decisions and legislation with the article. To avoid duplication of effort, please notify the Editor of your proposed article.

IN FUTURE ISSUES:

- Land application of biosolids

Synthetic materials and organic foods

Arthur Harvey, an organic blueberry grower and USDA certified organic product inspector, filed a civil action pro se on October 23, 2002 against then Secretary of Agriculture Ann Veneman, alleging certain regulatory rules violated the Organic Food Production Act of 1990 (OFPA), 7 U.S.C §§ 6501-6522.

In *Harvey v. Veneman (Harvey I)*[1], petitioner listed nine federal rulings that undermined the integrity of the OFPA and questioned the validity of the procedures the Secretary used to implement such rules.

Responding to the court's rulings in *Harvey I*, Congress immediately revised the Secretary's duty to enter notice and comment rulemaking and passed amendments to the OFPA in 2005, which Harvey then appealed in *Harvey v. Johanns (Harvey II)*[2] in 2006,with the final ruling being entered July 24, 2007.

Background to the OFPA

Recognizing the growing popular demand for organic products, Congress enacted the OFPA to form a coherent system of standards to manage the processing, handling, labeling, and marketing of organic products. The act would also promote interstate commerce in fresh and processed organic products. Finally, the act would establish a certification program for both producers and handlers of such organic products.

Furthermore, the OFPA establishes a National List of synthetic ingredients that may be added to organic food at any point during the product's life stage and still allow the product to be produced, labeled, marketed, and sold as an organic product. The National List consists of five non-organic ingredients that may be used in agricultural products to be labeled and marketed as organic products whether or not the ingredient may be obtained in organic form, including, cornstarch, gums-water extracted only (arabic, guar, locust bean, carob bean), kelp (if used only for a dietary supplement or thickener), Lecithin-unbleached, and high-methoxy pectin. [3]

According to the OFPA, in order for a product to be considered "organic", the product must not contain any synthetic chemicals, except those provided for by the National List or those approved by the Secretary based on guidelines within the act, yet not contained within the National List. With the exception for livestock, the product may also not be treated with any prohibited materials or synthetic chemicals for three years prior to the harvest of the product, and must be produced and handled in accordance with an organic plan originating with the producer and handler, approved by a certifying agent.[4]

In order for a product to be labeled "100% organic", it must be a raw or processed product that contains one hundred percent organically produced ingredients by total weight, excluding water and salt.[5]

To be labeled and marketed as an "organic" product, the product must not have any synthetic ingredients unless otherwise provided for on the National List, added in the processing or post-harvest life stage of the product. The producer also may not add any ingredients that are not organically produced, unless on the National List, and not contain more than five percent of the total weight of the finished product, not including water and salt.[6]

For a product to the bear the label "made with organic (specific products or food groups)", the product may contain seventy to ninety-five percent of its total weight in organically produced ingredients excluding water and salt.

However, in §6510, the act gives the Secretary discretion to allow the word "organic" to be used on the main display panel of products containing at least fifty percent of the product's total weight excluding water and salt if also approved by the National Organic Standards Board and the Secretary of Health and Human Services. Products containing less than fifty percent their total weight of organic ingredients by weight may also use the word "organic" if approved by the NOSB and the Secretary of Health and Human Services, but only on the ingredient list on the label panel.

The main contention within *Harvey I* and *II* lies in the use of synthetic ingredients or processing aids, outside those allowed by the National List, within the final processing and handling of the organic food products. The secondary issue is the rotation of previously non-organic crops and livestock onto an organic regimen and whether they may be rotated into

Cont. on page 2

and out of organic standards, while maintaining their organic integrity.

***Harvey I* - nine counts**

Filed in October 23, 2002, *Harvey I* contained nine counts alleging violations of the OFPA by regulatory rulings made by Secretary Veneman. *Harvey I* began with a magistrate hearing to recommend courses of action in regards to cross motions for summary judgment. Regulatory rulings made through informal rulemaking are afforded *Chevron* deference and are thus only reviewed under the arbitrary and capricious standard, and may be set aside only if they are found to be not rational or not based on a consideration of relevant factors.[7]

Before the counts may be discussed, the issue of Arthur Harvey's standing must be addressed. The magistrate determined Harvey had standing, because he showed certain injury would occur as an organic consumer actively involved in the formal rulemaking process, an organic grower, and a USDA certified inspector, with one exception.

The magistrate denied standing as to count seven, which challenged the compatibility of 7 C.F.R §205.236. This regulation allows a one-time exception for conversion of an entire dairy cow herd to organic production with 7 U.S.C §6509, which provides express instructions on how to convert and certify a dairy herd for organic production. Furthermore, he asserts the exception was promulgated in the 1997 proposed rule, but was removed and unavailable for comment during the notice and comment period in 2000. The exception then reappeared in the final rule issued without public commentary. The Secretary argued that the OFPA is at best ambiguous as to the feeding of cows being converted to organic production within the year time frame allowed by the statute. While the magistrate does not wholeheartedly accept Secretary Veneman's justification, because Harvey's explanation of how the procedures were violated was inadequate and his only injury was based on his claim as a milk consumer, he was denied standing to assert that particular claim. [8]

As to the other eight claims, the magistrate ruled in favor of the secretary in all but count nine of the complaint. Harvey appealed the magistrate's decision to the district court in a timely fashion. The district court reversed the magistrate's decision with respect to count nine to rule in favor of the Secretary. Harvey then appealed seven of the nine original counts to the First Circuit Court of Appeals, which entered its final decision in January 2005.

The First Circuit immediately reversed the magistrate's opinion on Harvey's standing to challenge the conversion of a dairy herd to organic milk production. The court relied on Harvey's assertion that not only is he a milk consumer but his commercial dealings with organic dairies more than satisfies the zone of interests requirements and his interests are not so marginally related to the statute that it cannot be reasonably assumed Congress did not permit the suit.[9]

Count one focuses particular attention on non-organically produced agricultural products that may be used in "organic" and "made with organic" products when a certified inspector deems the product to be commercially unavailable in organic form. Harvey asked the court to delete this language as it considerably undermines the purpose of the National List. The Secretary maintained that §205.606 allows only the five products listed above to be included as ingredients in "organic" and "made with organic" products when not available commercially in organic form. As the magistrate and the district court failed to clarify that §205.606 does not establish a blanket exemption, the First Circuit remanded for a declaratory judgment to that end.[10]

Count two pointed out the ambiguity within the OFPA regarding the use of a private certifier's seal on ninety-five percent organic products which may not be labeled with the USDA organic seal. Harvey's dispute resides in the language of the act as it now reads that would allow for ninety-five percent organic products to bear both the USDA certified seal and private certifier seal, which could mislead consumers. The circuit court, however, agreed with the district court that because of the limitations placed on the use of the USDA organic seal and the silence of the act as to certification of products, Congress intended to give deference and discretion to the Secretary.[11]

Count three addresses the regulations pertaining to nonagricultural, non-organic substances used as processing aids. Section 205.605 lists thirty-six substances that may be used as processing aids in "organic" and "made with organic" products. Harvey contends that this list violates the core values of the OFPA, which prohibits the use of synthetic ingredients unless otherwise provided by the act to be used in the processing or post-harvesting handling of the product. While the Secretary agreed with Harvey in that there is a "general prohibition" on synthetic additives, the OFPA admits exemptions, such as those included on the National List. The circuit court minced few words in their conclusion that the regulation addressed in Count III is clearly contrary to the OFPA and that the Secretary has exceeded his authority.[12]

Count five asserts that the 7 C.F.R. §205.101 exclusion of wholesalers and distributors breaches the application to handlers and those included in the handling process. The First Circuit interpreted the statute to include only sealed package products and their handlers, thus demonstrating Congress' knowledge of their exclusion of final retailers without exempting wholesalers and handlers from the act. Thus the court affirmed the district court's grant of summary judgment and defers to the reasonable interpretation of the Secretary.[13]

Count six challenged 7 C.F.R §205.501, which proscribes certifiers and inspectors from giving advice or acting as a consultant for farmers wishing to overcome the obstacles for organic certification. The court foresaw a conflict of interest on the certifying inspector's behalf of providing beneficial, yet incorrect advice, to producers regarding the act. Noting the silence within the statute, the court must defer to a reasonable interpretation by the Secretary. In response to the deference given, Harvey asserted that the Secretary's reasonable interpretation would be in violation of his Constitutional right to free speech as a USDA-certified inspector. The court reasoned that the government has not created a program that would aid private speech, but merely regulate governmental messages. Accordingly, the court found that the limitation placed is a reasonable interpretation by the Secretary and affirmed the decision of the district court.[14]

Count seven, as mentioned before, targets the conversion of dairy herds to organic milk production. Under §7 C.F.R. §205.236, dairy herds are required to be fed organic grain for only three months before the milk may be

Cont. on page 3

Agricultural Law Update

VOL. 24, NO. 11 WHOLE NO. 288 NOVEMBER 2007
AALA Editor.....Linda Grim McCormick

2816 C.R. 163, Alvin, TX 77511
Phone: (281) 388-0155
E-mail: lindamccormick@gotsky.com

Contributing Editors: Amanda M. Thomas, University of Arkansas; L. Leon Geyer, Virginia Tech; Jesse J. Richardson, Virginia Tech; Sara Breakiron, Virginia Tech; Robert P. Achenbach, Eugene, OR.

For AALA membership information, contact Robert Achenbach, Executive Director, AALA, P.O. 835, Brownsville, OR 97327; Phone 541-466-5444; Fax 541-466-3311; E-mail RobertA@aglaw-assn.org.

Agricultural Law Update is published by the American Agricultural Law Association, Publication office: County Line Printing, Inc. 6292 NE 14th Street, Des Moines, IA 50313. First class postage paid at Des Moines, IA 50313.

Cont. on page 4

considered organic. Meanwhile, the statute dictates two levels of feeding over the course of a year before the product may be deemed organically produced, directly conflicting with the ruling. The court viewed the ruling as the Secretary's attempt at creating an exception and promptly thwarted the Secretary's attempt, thereby granting summary judgment in favor of Harvey, invalidating the regulation.[15]

Count eight focuses on the prohibition of certifiers requiring more stringent practices than those contained in the OFPA. As a result, the higher standard amounted to an unconstitutional regulation of commercial speech. The court views the prohibition not as a frustration of the purposes of the OFPA but rather upholds Congress' intention for it to be a dependable national standard and grants summary judgment in favor of the Secretary. The court does not entertain the constitutional argument as Harvey did not raise it before this appeal.[16]

In conclusion, the First Circuit upheld the district court's decision to grant summary judgment for counts two, five, six and eight in favor of the Secretary. The first count is remanded to the district court for a declaratory judgment clarifying the interpretation of the regulation consistent with the appellate court's findings. Finally with regard to the third and seventh count of the complaint, the court reverses the district court's grant of summary judgment in favor of the secretary and remands for judgment in Harvey's favor.

Congressional response

In light of the consent decree issued in *Harvey v. Veneman*, Congress swung into action, passing an amendment to the OFPA that alleviated any responsibility the Secretary had to comply with the decision of *Harvey I*. The 2006 Agricultural Appropriations bill adds language to 7 C.F.R. 6501, *et seq*. without notice and comment rulemaking.

The first change Congress made was to clarify the prohibition on synthetic ingredients to forbid the addition of "any synthetic ingredient not appearing on the national list during processing or post-harvest handling of the product." 7 C.F.R. §6510.

Congress next changed the title of §6517 to exempt synthetic substances not listed on the National List from the above prohibition when added during "organic production and handling operations".

The final and most drastic change was to eliminate 6517(c)(1)(B)(iii) completely, which limited non-organic substances used in handling to be added to non-synthetic ingredients. Not surprisingly, this is the language relied upon by the First Circuit to strike down the regulations.

***Harvey II*- the challenge**

Upon learning of Congress' changes, Arthur Harvey filed a motion in June 2006 to enforce the portion of the consent decree that prohibited the use of synthetic substances in the processing of organic food products.

In his motion to enforce the consent decree, Harvey contends that although Congress permits the use of synthetic ingredients used in handling, the provisions of the OFPA do not permit the use of synthetics as processing aids, as the OFPA defines ingredients and processing aids separately. Harvey asserts that Congress used the word "ingredient" intentionally, and thereby, did not mean to include synthetic processing aids into the amendments.[17]

The court rejects this argument based on the mere fact that the word ingredient was in the original bill and not a new word added by the amendment. District Judge Hornby disagrees with Harvey and states that the amendment to 6510 merely clarifies that the use of synthetic ingredients appearing on the National List is no longer prohibited in the handling process. Thus synthetic ingredients and processing aids may now be used in handling operations, such as, packaging, as long as they appear on the National List.[18]

In the second count of his appeal, Harvey claims a 2002 Policy Statement issued by the USDA violated the judgment of *Harvey I*. The Policy Statement allowed "food contact substances" to be utilized in organic foods regardless of whether they are reviewed or on the National List, consequently invalidating the consent decree prohibiting use of synthetic processing aids.[19]

The district court again ruled against Harvey, refusing to pass judgment on whether the 2002 Policy Statement violated the *Harvey I* judgment as it reasoned it was outside the scope of the consent decree. However, the district court went so far as to enter a new judgment for the Secretary, mitigating any further accountability he should have under the *Harvey I* consent decree.[20]

Harvey appealed the district court's ruling to the First Circuit where the questions before the court became: were the two regulations that were struck down in *Harvey I* reclaimed by the 2005 Amendments and what was the scope of the final judgment issued in *Harvey I*.

The First Circuit used a split review to decide these issues. As to whether the congressional amendments reclaimed the regulations invalidated by the consent decree, the court looked for an abuse of discretion, while determining whether the statutes were unclear. If they were found to be unclear, the court must follow the *Chevron* doctrine giving deference to the Secretary's reasonable interpretation. In regards to the scope of the final judgment, the court reviewed that issue de novo.[21]

The First Circuit focused on the impact of the amendments made by Congress in 2005. The court noted that the addition to include synthetics in handling processes and deleting the language relied upon by the First Circuit's decision in *Harvey I* were to remedy any action further required by the Secretary. With regard to the ingredient vs. processing aid distinction argued in motion to enforce, the First Circuit agrees with the district court's reasoning that Congress made no distinction as the word "ingredient" was there in the original text of the amendment.

The First Circuit stresses, however that due to the timing and the measures taken by Congress, their intent was to salvage the invalidated regulations; thus the 2005 amendments do supersede the consent decree and the district court did not abuse its discretion in denying Harvey's motion. [22]

When taking into account the scope of the final judgment with regards to the policy statement, the court refused to look beyond the four corners of the judgment to include the policy statement within the confines of the consent decree. However, the court alluded to the fact that the Policy Statement most likely came from the discovery and briefing work done for this case and may very well be in breach of the OFPA, requiring further litigation.

Lessons learned

When taking into account *Harvey I* and *II*, it is clear that Congress and by extension the Secretary of Agriculture intends to permit synthetic substances on or, for all intents and purposes, off the National List to be used in the processing and handling. It is also self-evident Congress intended the Secretary of Agriculture to have broad sweeping powers to propose and promulgate rules which would further the purpose of having a cohesive national organic standards.

The largest lesson learned is the most transparent and possibly the hardest to swallow. Although Mr. Harvey won some of the small battles with the aid of the First Circuit, he is no farther along in the war against synthetic materials in organic foods than when he started.

—Amanda M. Thomas, Graduate Assistant, University of Arkansas School of Law Graduate Program in Agricultural Law

---

[1] 2003 WL 22327171 (D.Me., 2003).
[2] *Harvey v. Johanns*, 494 F.3d 237 (Maine 2007).
[3] 7 C.F.R. §205.606.
[4] 7 C.F.R. §6504.
5 7 C.F.R §205.301(a).
[6] 7 C.F.R §205.301(b).
[7] *Motor Vehicles Mfrs. Assoc. v. State Farm Mut.*, 463 U.S. 29, 42-43 (1983).
[8] 2003 WL 22327171 (D.Me.) at *20.
[9] *Clarke v. Sec. Indus. Ass'n*, 479 U.S. 388(1987).
[10] 2003 WL 22327171 (D.Me., 2003), at *6.
[11] *Id*. at *10.
[12] *Id*. at *8.
[13] *Id*. at *13.
[14] *Id*. at *16.
[15] *Id.* at *17.
[16] *Id.* at *22.
[17] 462 F.Supp.2d 69 (Maine 2006).
[18] *Id.*
[19] *Id.*
[20] 2006 WL 3392617 (D.Me., 2006).
[21] 494 F.3d 237, 240.
[22] *Id*. at 242.

Wind farms: windfall or wipeout?

By L. Leon Geyer, Jesse J. Richardson, and Sara Breakiron

This paper examines the benefits offered and problems posed by commercial wind farms. The paper concludes that wind will continue to play an important role in the world energy puzzle.

Windmills have long dotted the agricultural landscape, with the roots of wind energy originating in Persia in 500-900 AD, where the first windmills were developed to pump water and grind grain (Energy Information Administration). The transition from small-scale windmills pumping water on farms to industrial windmills used to generate electricity did not start until the early 1970's.

Since its modest beginnings, wind power has become the fastest growing energy industry in the world. "…[W]orld wind power use has multiplied nearly fourfold over the last five years, a growth rate matched only by the computer industry" (Brown[a]). In 1999, there were 3,900 megawatts (MW) of installed capacity worldwide (Windustry), which grew to approximately 47,000 MW by mid-2005 (Global Wind Energy Council). This 47,000 MW is enough power to provide electricity to "…19 million average European households, or 47 million people" (British Wind Energy Association). Since the industry has been growing rapidly, the European Wind Energy Association (EWEA) revised 2010 projections of 40,000 megawatts to 60,000 megawatts (Brown[b]).

Although Europe is moving quickly to "harvest" the wind, many countries have yet to enter this phase. A country first needs to develop about 100 megawatts before wind development will accelerate. "As of early 2002, some 16 countries, containing half the world's people, have entered the fast-growth phase" (Brown[b]). The increasing number of countries entering this fast growth phase proves important because as the industry continues to grow, prices of generating wind will continue to fall. This effect is shown by the world wind energy capacity doubling every three years between 1990 and 2002. With every doubling, prices fell by 15% (Embrace Wind). Much of this growth is due to a growing manufacturing sector, innovative policies, and technological advancements.

Today, wind power in the form of "wind farms" is being promoted as a source of income for landowners (farmers), tax revenue for local government and schools, a solution to the energy crisis, a growth business, and an environmentally sound method of electric generation. This paper discusses the advantages and disadvantages of wind energy and assesses the future role of wind power. Will subsidy, Not In My Back Yard (NIMBY) forces, offshore development, or the rush of the wind determine the future adoption of wind power?

L. Leon Geyer, J.D., Ph.D., is a Professor of Agricultural and Environmental Law, Virginia Tech. Jesse J. Richardson, Jr., J.D., is an Associate Professor and Program Chair in Urban Affairs and Planning at Virginia Tech. Sara Breakiron was an undergraduate research assistant at Virginia Tech and is presently a graduate student at the University of Minnesota.

The economics of wind

Subsidies

Several factors, including cost reductions and progressive government policies (Windustry), cheaper and more efficient turbines, and positive environmental attributes (Aftandilian), have spurred the growth of the wind energy industry. However, as an infant industry, subsidies are needed in order for wind energy to compete with fossil fuels, especially considering the subsidies received by fossil fuel industries.[1] In addition, wind energy receives little of the subsidies designated for alternative energies.[2]

A 1996 study, *Energy Technology Status Report,* by the California Energy Commission showed that wind power is cost competitive with fossil fuels in the United States, especially when subsidized. The levelized cost[3] of electricity from coal ranges from 4.8 to 5.5 cents per kilowatt-hour (kWh), natural gas costs 3.9 to 4.4 cents/kWh, and nuclear power runs 11.1 to 14.5 cents/kWh (American Wind Energy Association, Comparative Costs). Wind energy incurs costs ranging from 3.3 to 5.3 cents/kWh with the production tax credit (available in the United States at that time), and 4.0 to 6.0 cents/kWh without the production tax credit (*Ibid*). Even though wind remains more expensive than coal or natural gas, some believe that if more wind farms are created, costs will continue to drop.

Falling costs

The cost of constructing a wind farm has fallen dramatically over the past two decades, from more than $6,000 per kWh in the early 1980's to $1,000 per kWh (World Link, Risk History). Drivers of lower cost include government subsidies, government policy, declining cost, and green power market incentives. Green market incentives spur electric utilities to diversify their mix of power (World Link, Global Wind Energy). These factors proved instrumental in making the cost of building a wind farm, and the cost of producing energy from wind, decrease by 84% in the last 20 years (The Pennsylvania State University).

Turbine design also significantly impacts the cost of wind power. Since taller turbines can sweep a larger area and therefore produce more electricity, use of these turbines lower the cost of production. A five-fold increase in rotor diameter (from 10 meters on a 25 kW turbine built in the 1980s to 50 meters on a 750 kW turbine common today) yields a 55-fold increase in yearly electricity output (Ibid).

Economies of scale

Economies of scale can significantly impact the cost of generating electricity from wind. If a 3MW wind farm and a 51 MW wind farm both receive winds of 18 mph, the cost of energy (COE) will differ significantly at each farm. The COE at the 3MW farm will be $0.059 kWh, $0.023 greater than the $0.036 kWh cost at the 51 MW farm, a 40% difference (American Wind Energy Association, Economics). Larger projects can spread transaction costs as well as operations and maintenance costs per kilowatt-hour because of the efficiencies of managing a larger wind farm, thus making the electricity less expensive to produce.

Although economies of scale exist for individual projects, these economies of scale fail to exist for the United States or world markets as a whole. The size of the United States turbine market may not be adequate to support domestic innovations in manufacturing and processes that would result in reduced wind turbine manufacturing costs (Chapman and Wiese). Although the United States market cannot currently take advantage of economies of scale, mass production of turbines promises savings of 1-2 cents per kilowatt hour (Brown[c]).

Advantages of wind power

Royalties to landowners

Advocates argue that wind power reinvigorates rural economies by diversifying them. Money is added to tax base and more income is provided to farmers. "Each 100 megawatts of wind development in southwest Minnesota has generated about $1 million per year in property tax revenue and about $250,000 per year in direct lease payments to landowners" (Parsons). This new source of income is also welcomed by ranchers in west Texas since royalties from oil wells are declining (*Id.*). **"**As one Iowa farmer described a wind turbine, 'It's like having an oil well in the sky." (Aftandilian). Payments to farmers or landowners are generally at 2-4% of annual gross revenue per turbine, depending on the output of turbines (Haley). Farmers generally gross $2,000 to $4,000 a year for each turbine (Brown[d]). These revenues substantially exceed revenues from most crops or livestock.

Job creation

Wind farms also hold promise to invigorate rural economies through job creation. "A New York State Energy Office study recently found that, for identical amounts of electricity produced, wind energy generates 27 percent more jobs than a coal plant

and 66 percent more jobs than a natural gas plant. Wind projects create employment opportunities in construction, operation, and maintenance and manufacturing" (National Wind Coordinating Committee). Meteorologists, surveyors, structural engineers, assembly workers, and mechanics all benefit from developing wind farms. In 1998-1999, 240 megawatts of wind capacity installed in Iowa produced 200 six-month long construction jobs and 40 permanent operations jobs (Windustry, Why Wind Energy?). In addition to the jobs that come with building a wind farm, manufacturing jobs are also increasing. LM Glasfiber, a Danish wind turbine blade manufacturer, opened a factory in 1999 in Grand Forks, ND, adding 130 employees and becoming one of North Dakota's larger employers (*Id.*).

Green customers

Wind power lacks appeal to a majority of utility customers because of the higher cost, but some environmentally conscious select the option of how many blocks of green power they want to buy. One block represents about a fifth of average household electric usage and costs about $2.50 more than energy from existing sources (Garcia). Buying 100 kilowatt hours of wind power each month costs less than a dime a day. Buying that much wind power for a year will save 1,200 pounds of coal and keep 2,400 pounds of carbon dioxide, the chief greenhouse gas, out of the air (Clean Energy for Colorado).

Many utility companies invest in wind power to capture a share of this premium market and to promote their company as environmentally friendly. Green Mountain Energy Resources, a Vermont utility company, "…pledged to build a new wind turbine in the state every time it adds 3,000 more customers for its green-energy programs" (Garcia). To date, most utility green pricing programs attract less than 3% of residential customers and even fewer commercial and industrial sponsors.

Diversifying the current energy portfolio

As a country's wind power industry expands, wind energy increasingly helps stabilize energy prices by minimizing the ups and downs of oil, natural gas, and other types of electricity-generating fuels (National Wind Coordinating Committee). Even though wind supplies an intermittent source of electricity, the price of wind power remains more stable than that of natural gas or oil. Wind power holds the ability to supply electricity to remote areas (Darvill), and leaves a small footprint, as to not interfere with crop production or livestock grazing (Windustry, "Why Wind Energy?").

Environmental benefits

Burning coal releases particulates that can cause/contribute to asthma and releases sulfur dioxide and nitrogen oxides which cause acid rain, and contributes to global warming. Natural gas is cleaner, but still emits pollutants and contributes to global warming. Nuclear power produces few emissions, but leaves spent fuel rods, which can remain radioactive for hundreds of years. In contrast, wind provides clean and renewable energy (*Id.*). "On a 'life-cycle' cost basis, wind ranks as one of the leading competitors for fossil fuels" (Elquist). A wind turbine only takes a few months, on average, to recover the energy that was used to create it" (The Pennsylvania State University). A Danish study conducted by the Ministry of the Environment "…estimated that a coal-fired power plant emits 360 times more Sox, NOx, and carbon dioxide to generate an equivalent amount of electricity over the 25-year life of a wind turbine" (Gipe).

Technological improvements

Technological improvements and volume production could lower the cost of wind energy by about 40% from current levels by 2030 (Parsons, Grid-Connected). Projections show a 5% reduction in turbine costs every time industry production doubles, with four or five doublings expected by 2030 (*Id.*). Taller turbines provide a key way to reduce costs of manufacturing. Taller turbines increase performance because faster winds are further from the ground. Reductions in turbine weight combined with innovative tower designs make production of taller towers at reduced cost possible (*Id.*). In the next 10 years, the cost of wind power could reach 2.5-3.5 cents/kWh if turbines are mass-produced (Chapman and Wiese).

Public support

According to a 2005 Yale University poll, 87 percent of Americans support expanded wind farms, and 86 percent want increased funding for renewable energy research (Environmental News Service). In addition to the public support, a new alliance of agriculture, faith, renewable energy advocacy, business, and environmental groups support wind energy (*Id.*). In England, wind farms enjoy support by 80% of the populace, while less than 10% oppose wind energy. Surveys in England conducted since the early 1990's near existing wind farms consistently find that most people favor wind energy, with support increasing among those living near existing wind farms (Embrace Wind). On the other hand, one study found that the greatest objection to wind power is the feeling that the various renewable energy sources simply cannot meet energy needs (Robins).

Disadvantages of wind power

Noise

Some opponents or skeptics of wind power cite noise as one of the major drawbacks. Design, siting, and proper construction of the blades provides the key to controlling noise emissions from wind turbines. Careful attention to these details makes achieving the goal of 45 decibels at a residence, which is comparable to street traffic or room conversations, relatively easy to achieve (Hansen). Most towers must be located 1350 meters from residences in order to minimize noise (*Id.*). Distance provides the only means to minimize constant and low swooshing sounds emitted from wind turbines (Darvill).

Grid system requirements

The weak grid system in the U.S. presents a major barrier to the development of wind farms. Since most rural distribution systems in the United States are voltage-limited, the systems are not able to accommodate large wind projects due to the single phase lines (Parsons, Cohen and DeMeo). The lack of a strong grid system will continue to hinder the wind power industry in the United States since the ideal locations for many wind farms are in rural, remote places. A strong distribution system made up of three phase connections provides the key because such systems can absorb significant amounts of intermittent wind power with relatively modest impacts on the quality of power. Not only is the lack of three phase connections a barrier to wind development, but the cost of laying new cable proves prohibitive. Cables can cost as much as $179,000 per kilometer (Elquist).

Intermittency

Wind power also suffers from intermittent power quality problems. "At present, the lack of manufacturing design standards and certification accepted by both the wind industry and the United States utility industry obligates utility engineers to perform detailed evaluation of each proposed installation of large turbines to determine whether power quality impacts would be acceptable" (Parsons, Cohen and DeMeo). Since wind provides intermittent energy, the source proves unreliable and requires systems to store wind power (Friends of the Allegheny Front). Although backup power would be required, this amount need not be significant. One study revealed that 1,500 MW of new wind energy would only require 7.8 MW of new backup power (American Wind Energy Association, Wind Power Outlook 2005).

The intermittent nature of wind power presents difficulties in insuring that energy is available when needed. "The peak period for generating wind power is in the winter when wind currents are stronger, but the peak season for demand is during the heat of summer" (Stebbins).

Capacity factor

The megawatt output of a wind farm can be misleading since most people fail to realize that this number represents the theoretical *maximum* output of a wind farm, not

Cont. on page 6

Wind power/ cont. from p. 5
the actual regular output. Wind turbines begin to generate electricity at about 8 miles per hour (mph), reach full power at about 30 mph, and are required to shut down to protect the mechanism at about 55 MPH (Sweet). Most wind sites produce *some* power more than 90% of the time, but only achieve peak production around 10% of the time (Frontline). The typical capacity factor of a wind farm equates to 30%, while conventional sources typically have a capacity factor of 70% (Friends of Allegheny Front). Many opponents use the low capacity factor as a reason against investing in wind farms.

Loss of property value

The potential or real loss in property value caused by wind farms remains a debatable issue. One 2003 study concluded that property values within the five-mile view shed of the projects had not been harmed and in fact, generally rose more quickly than in outlying areas (Renewable Energy Policy Project). Since many good wind power sites are near the coast and expensive land (Darvill), factors such as high initial investment, aesthetics, and bird deaths (Middlebury College) can feed into debates over property values, and both real and perceived negative impacts.

Aesthetics

Opponents consider the projects eyesores that will result in a drop on property values. Complaints against these towers as eyesores tend to voiced more strenuously in affluent communities, like Cape Cod, Massachusetts (*Ibid*). A Suffolk University study found that the project would cost the Cape Cod economy at least sixty-four million dollars in tourism spending (*Ibid*).[4] Real or perceived, aesthetic impact of the turbines assume great importance to those in the surrounding area.

The complaints against windmills compare to the complaints against cellular towers (Hayden). Some allege that the devaluation from the construction of a cellular tower in a residential area could be as high as twenty percent (Maskaly). Erection of large metal towers, be they cellular or wind turbine, brings about concerns that are near and dear to the hearts and wallets of those in the areas surrounding them (Hayden).[5]

Effects on wildlife

Fears exist that wildlife will be negatively affected by the construction of wind turbines. Wind turbines can serve as a physical barrier for birds, who must beware of the spinning blades, or animals, which may experience habitat fragmentation with the installation of a wind farm. A 2004 study estimated 1,500-4,000 bat deaths from wind turbines on Backbone Mountain, MD. As these bats are not endangered, the deaths violate no state or federal law, but prove controversial (Blum). The connection between the wind turbines and bat deaths has yet to be fully explained (*Ibid*). One hypothesis states that bats appear to be attracted to the open areas cleared by wind developers, as they can more easily find insects there. But researchers remain unsure why the bats collide with the blades of the turbine- accident or attraction to the blades (*Ibid*). Some environmentalists propose a moratorium on wind development to research the deaths. Other environmentalists believe the deaths are outweighed by the benefits of wind power (*Ibid*).

As wind technology has improved, the speed of the blades has slowed considerably to a range of 8 to 21 rotations per minute (Whitley). Radar studies of European offshore wind farms reveal that birds sense the presence of the turbines approximately 150 yards away and either fly between the rows of turbines or completely around the wind farm altogether (*Ibid*). A 2005 Dutch study showed that "each turbine killed an average 28 birds per year, a third of what had been assumed on the basis of research conducted in the 1980s (Planet Ark). A new study suggests the Netherlands' 1,700 turbines kill about 50,000 birds a year, compared to the two million birds that perish each year on Dutch roads (*Ibid*). Large wind turbines producing more than 1.5 megawatts of power kill slightly more birds than smaller, older windmills. Although these bigger turbines kill more birds, some claim this is offset by the increased ability to produce electricity - five to 10 times more with a larger turbine (*Ibid*).

Studies conducted on wind power facilities in northern California, Pennsylvania, and West Virginia show that wind turbines kill large numbers of raptors and bats. Studies in other parts of the country show comparatively lower levels of mortality, although most facilities cause at least some bird deaths. The results of these studies were confirmed by a September 2005 GAO report on wind power and wildlife, which concluded that the impact of wind power on wild life varies by region and species (General Accounting Office). Since many wind power facilities in the United States have not been studied, and the research thus far is contradictory, scientists cannot draw definitive conclusions about the threat that wind power poses to wildlife. Further, much is still unknown about migratory bird patterns and overall species population levels, making it difficult to determine the cumulative impact that the wind power industry has on wildlife species.

Conclusions

On the surface, wind power provides an environmentally sound source of renewable energy. However, wind energy proves controversial in practice. Bird and bat deaths, intermittency, home value and aesthetic concerns complicate the analysis. In addition, wind-generated electricity costs more than traditional sources, although the cost continues to decline.

Wind power undoubtedly will continue to provide a small, yet rising and significant, portion of the world's future energy needs. Emphasis on aesthetic placement, economically and electrically efficient ties to grids, and environmentally sensitive siting of wind farms is likely to increase and improve over time.

Editor's note: This article was originally published in Interdisciplinary Environmental Review, Vol. IX, Number 1, June 2007.

References were omitted from this printing in the interest of space; however a complete list of references can be obtained from author, Jesse Richardson, at jessej@vt.edu or 540-231-7508.

---

[1] "It is estimated that in the United States subsidies to the fossil fuel industry overall exceed $20 billion a year." In contrast, the production tax credit "…over a decade it has cost roughly $55 million – and remarkably effective" (Bivens).

[2] "According to *Federal Energy Subsidies: Not All Technologies Are Created Equal* the U.S. government has spent approximately $150 billion on energy subsidies for wind, solar, and nuclear power—96.3% of which has gone to nuclear power." (Campbell).

[3] "Levelized costing calculates in current dollars all capital, fuel, and operating and maintenance costs associated with the plant over its lifetime and divides that total cost by the estimated output in kWh over the lifetime of the plant." (Energy Information Administration).

[4] The study has been challenged on the grounds that it used too small of a sample, and studies on other wind projects have generally found no damage to tourism as a result of wind turbine presence. It is hard to find sustainable studies about the value of views.

[5] These factual similarities allow for further useful comparison via the existing national policies towards the programs supporting these two pieces of infrastructure.

State Roundup

OREGON. *Ownership*. The plaintiff sought to modify the water rights of seven water rights certificates by consolidating seven points of diversion to two points of diversion. The plaintiff's land was appurtenant to the water rights to be used but two of the water rights certificates were owned by the irrigation district, with the other five owned by the plaintiff. The irrigation district objected to the consolidation but the water resources commission allowed the consolidation because the water used came from a river appurtenant to the plaintiff's land. The court reversed, holding that the water rights certificates established the ownership of the water rights in the irrigation district and the consolidation could not include the two certificates without the application by the irrigation district. *Fort Vannoy Irrigation District v. Water Resources Comm'n.*, 207 Ore. App. LEXIS 974 (Or. Ct. App.2007).

—Robert P. Achenbach, Jr., AALA Executive Director

Position notice: Executive Director for Pace Law School Energy Project

The Pace Law School seeks to fill the position of Executive Director of the Pace Law School Energy Project. The Energy Project, unique among law schools, is a preeminent advocacy and research organization which promotes sustainable energy. It advocates on behalf of environmental and consumer groups. The Energy Project is an integral component of Pace Law School's Environmental Law Program, which is consistently ranked among the top three in the nation. The Executive Director is responsible for the Energy Project's strategic direction, administration, and funding, and in this context supervises a high-level staff. He/she acts as liaison with energy policymakers at the federal, state, and local levels of government, the business community, press, consumer groups, and donors.

The new Executive Director will assume these responsibilities at an exciting time for Pace's Environmental Law Program, which is celebrating its 30th anniversary in 2007-2008, and it is conducting a comprehensive curriculum review to raise the profile and breadth of energy and climate courses and experiential learning opportunities offered to students.

The Executive Director directs the Energy Project's cutting edge legal and policy analysis, legal intervention, and market support activities. Given the Project's overall focus of reducing the environmental footprint of the production and delivery of electricity, Project efforts are concentrated in the areas of global climate change mitigation, energy conservation, and promotion of renewable energy technologies and clean distributed generation.

The Executive Director administers the Northeast Combined Heat and Power Application Center which delivers education, policy support, and technical assistance to stakeholders throughout the seven state New York-New England region. He/she also provides legal and technical support and direction in the development of the Northeast Regional Greenhouse Gas Initiative, and supervises the deployment of *The Power Scorecard*, an instrument for informing electricity consumers of the sustainability of utility power sources.

Key objectives for the Executive Director include enhancing the Energy Project's visibility and recognition at the national level and maintaining and enhancing funding for the Energy Project. The Executive Director also will have the opportunity to teach Pace's energy law courses and will interact with students and work closely with the environmental law faculty and staff.

The ideal candidate for this position preferably should have a Juris Doctor degree and should have excellent administrative and management skills, in-depth knowledge of energy law and the energy community, and familiarity with academic institutions. The Center is funded by public and private grants and contracts, and the candidate must be knowledgeable about and be able to assure compliance with grant and contract conditions and associated financial accounting.

The position's salary range is between $100,000 and $120,000, depending on experience. Pace University benefits are provided.

Pace is located in White Plains, New York, just 30 minutes north of New York City. Its proximity to the City provides the Pace community outstanding opportunities for intellectual and cultural activities. Within 45 miles of the Appalachian Trail and only a few miles from the historic Hudson River and Long Island Sound, Pace affords ready access to some of the most beautiful areas in the Northeast. For more information about the Energy Project and Pace Law School, see www.law.pace.edu

To apply, please send a resume and references to:

Thomas Bourgeois
Acting Executive Director
The Energy Project
Center for Environmental Legal Studies
Pace University School of Law
78 North Broadway
White Plains, New York 10603
tbourgeois@law.pace.edu

FEDERAL ROUNDUP

FAIR LABOR STANDARDS ACT

The plaintiffs were chicken processing plant workers who were required to wear protective clothing while working. The plaintiffs argued that the defendant employer violated the Fair Labor Standards Act for failing to pay the workers for the time spent putting on and taking off the protective clothing over the course of a work day. The evidence showed that the amount of time spent donning and doffing such clothing varied from six to 13 minutes a day. The trial court had given the jury instructions as to the definition of work as something which required exertion, which included consideration as to whether the clothing was cumbersome or heavy or required concentration for donning or doffing. The appellate court remanded the case, holding that the instruction was improper because the proper test for the definition of work was whether the activity was controlled or required by the employer and was pursued for the benefit of the employer. *De Asenico v. Tyson Foods, Inc.*, 2007 U.S. App. LEXIS 21289 (3d Cir. 2007), rev'g and rem'g, 2006 U.S. Dist. LEXIS 33411 (E.D. Penn. 2006).

TAXATION OF PASSIVE INVESTMENT INCOME

The taxpayer S corporation decided to change its farming operations from employee-run to crop-share leasing of the property. Under the crop share agreements the taxpayer was actively involved in most management decisions, including deciding what crops to plant, monitoring crop rotation, determining varieties of seeds to plant, and deciding what chemicals to apply to the crops. In addition, the taxpayer paid 50 percent of crop inputs (such as storage, chemical treatment, and seed). The taxpayer was liable for real estate taxes, insurance, tiling, and building repairs including maintenance of the dryers, elevator leg, grain blower and storage bins. The tenants were responsible for labor and machinery. The IRS ruled that the rents received under the crop-share leases were not passive investment income under I.R.C. §1362(d)(3)(C)(i). Ltr. Rul. 200739008, June 20, 2007.

STATE REGULATION OF HORSES

The plaintiff, a non-U.S. company, owned and operated the only U.S. facility for slaughtering horses for human consumption, primarily outside the U.S. In 2007, Illinois amended the Illinois Horse Meat Act, 225 ILCS 635, to prohibit the slaughtering of horses for meat for human consumption, whether the meat is sold, given away or exported. The plaintiff argued that the amendment violated the U.S. Commerce Clause and the federal Meat Inspection Act which limits the powers of the states to regulate interstate and foreign commerce. The court ruled that the federal Meat Inspection Act applied only to the extent horse meat was produced for human consumption but had no authority over whether a state allowed or prohibited the slaughter of horses for human consumption. The court also held that the law did not violate the Commerce Clause in that the law did not favor Illinois companies over companies in other states, of which there are none. *Cavel International, Inc. v. Madigan*, 2007 U.S. App. LEXIS 22510 (7th Cir. 2007).

—Robert P. Achenbach, Jr., AALA Executive Director

First Class Mail
U.S. POSTAGE
PAID
Des Moines, Iowa
Permit No. 5297

6292 N.E. 14th Street
Des Moines, IA 50313

agricultural law update

AMERICAN AGRICULTURAL LAW ASSOCIATION

2007 Conference

The 2007 Annual Agricultural Law Symposium is history, and from the many compliments I received, the conference was one of our best. San Diego did not disappoint and provided fine summer weather each day. I hope many attendees were able to at least sample some of the fine coastal cuisine and the fascinating tourist attractions. Many thanks to President Roger McEowen and the excellent speakers for a varied and informative program.

2007 Conference Handbook on CD-ROM

Didn't attend the conference in San Diego but still want a copy of the papers? Order the entire written handbook plus the 1998-2007 past issues of the *Agricultural Law Update* on CD. The files are in searchable PDF with an interactive table of contents that is linked to the beginning of each paper. Order for $45.00 postpaid from AALA, P.O. Box 835, Brownsville, OR 97327 or e-mail RobertA@aglaw-assn.org. Copies of the printed version are also available for $90.00.

2008 Conference

Planning for the 2008 Symposium is already underway, with new President-elect Maureen Kelly Moseman seeking topic ideas and speakers for the meeting in Minneapolis, MN on October 24-25, 2008 at the downtown Marriott. The Marriott is located near the light rail system which connects downtown to the airport, the Mall of America and other local attractions. We will be working with the Minnesota Bar Ag. Section to provide the best all around experience for attendees. Mark your calendars now so we can have a record attendance.

Change of Address and phone/fax numbers for AALA Executive Director's office:

AALA
P.O. Box 835
Brownsville, OR 97327
Phone: 541-466-5444 Fax: 541-466-3311
Robert P. Achenbach, Jr,
AALA Executive Director