

Proposal to Modernize Wisconsin Dairy Farm Family Businesses

**Presented to
Joint Committee on Finance
(Brian Burke, Senate Chair / John Gard, Assembly Chair)**

**Public Hearing, Marshfield, WI
Wednesday, April 4, 2001**

Presented By Michael Krutza, CEO FCS NCWI

Background

Wisconsin's dairy industry is the state's single largest business representing more than \$3.5 billion in gross farm receipts and a combined economic impact of \$17 billion on Wisconsin's economy. The dairy industry is in danger of losing its farmers and the infrastructure needed to continue if modernization doesn't occur.

In 1996, the Dept of Commerce created a business planning grant program, which has singularly influenced modernization more than any other effort. More than 500 farm families in Wisconsin have professionally developed and evaluated business plans to help them determine if they should modernize. This is critically important since an estimated 90% of Wisconsin's dairy farmers have not adopted proven technologies of milking parlors and freestalls, which have been available since the mid-1960's. The impact of these 500 farm families modernizing represents significant economic growth for Wisconsin rural communities. Assuming an average herd size after modernization of 100 cows, these farm families represent approximately \$150 million of cash receipts. According to Dr. Larry Swain, UW River Falls, 500 modernized farmers represent approximately \$370 million to the local communities. **Clearly, dairy farm modernization is key to rural economic development in Wisconsin.** Furthermore, according to Ohio State University, analysis reveals that producers need to grow their herds by 60% nearly every 10 years to keep pace with inflation.

In 1997, FCS of North Central Wisconsin conducted research on the results of farmers using the Dept. of Commerce early planning grant program. That study showed that farmers ROA, net operating rate, break even cost per CWT improved regardless of the farm operations size. While this grant program was a positive first step at the producer level, even more needs to be done. Wisconsin's alarming low adoption of the proven technologies of parlors and freestalls since the mid-1960's is tragic. There remains little evidence that the majority of farmers have yet selected modernization as a long-term plan for their viability.

This proposal addresses ways which the legislature, the Governor, farmers and industry can build on common ground, yet advance new thinking and solutions to modernizing Wisconsin dairy industry.

Recommendations

Leadership/Vision

There is a need for a hopeful vision for the industry staking out the importance of the industry to all of Wisconsin's stakeholders. This can best be championed by the Governor. Therefore, we propose the Governor with the support of the Secretaries of DATCP, Commerce and DNR should state the bold vision of **growing Wisconsin's dairy industry from its current level of \$17 billion to \$25 billion by 2010.** Furthermore, the Governor would instruct the respective secretaries to marshal all necessary resources within their departments to achieve this vision in a way which is environmentally sound and supports the economic interests of all the stakeholders. As a means to accomplish this vision, the following proposals are offered for consideration.

1. Educational Support

The billions of dollars spent on the state's high school, technical schools and university teachings since the 1960's has had little apparent impact on the adoption of basic technologies for the state's dairy industry evidenced by less than 10% of Wisconsin dairy farms using parlors and freestalls. New thinking and new strategies are needed.

*The curriculum of these teaching institutions in the business courses should ensure all students receive competency certification in business skills of managing for return on assets, return on equity and understanding break even cost of production. Deans, administrators and leaders within the states educational system would be encouraged to think differently about impacting the state's rural population in terms of technology adoption. The states initiative for Biotech adoption for the future faces an uncertain fate if the strategies of the past technology adoption aren't changed

*Tuition credit assistance should be offered similar to athletic and academic scholarships for the next 5 years to any person who successfully completes continuing education in the area of business or agriculture and returns to production agriculture. Tuition credit would be granted based on the years the individual returned to production agriculture. Additionally, the legislature should increase funding allocations for programs within the Dept. of Commerce, which provide for professional planning assistance to producers.

The estimated reinvestment cost could be \$6 million annually for tuition assistance, assuming 2000 individuals @ \$3,000 tuition costs. Assessing the benefits of this would be linked to the number and performance of the farms modernizing.

2. Support reinvestment in plant, equipment and technology

Assuming the vision of creating a \$25 billion dairy industry in Wisconsin by 2010, time is of the essence to reinvest in the family farms, the processing industry and all of the attendant infrastructure. Most notably will be the need to invest in parlors, freestalls and environmental support systems, including nutrient management. Therefore, we propose Wisconsin government provide investment tax credits for the next 5 years to family owned dairy farms to stimulate this needed reinvestment. **The tax credits would be**

limited to plant and equipment associated with the modernization of the farm, with special attention to parlors, freestalls and adoption of environmental practices.

Supporting Wis. Dairy Industry is Good Economic Development

Renewal and reinvestment in Wisconsin's dairy industry is good economic development. Modernizing only 10% of Wisconsin farms would generate annually an additional \$450,000,000 of gross farm receipts to farmers and represent nearly \$1.2 billion to the local communities of Wisconsin. The additional income tax and sales taxes generated could well exceed \$50 million in state revenue annually.

Note—this proposal is supported by the Wisconsin Federation of Cooperatives and part of the legislative agenda for WFC.

These proposals are great economic development for the State of Wisconsin. The costs to encourage modernization could well be offset by additional income and sales tax generated from a strengthened dairy industry.

Modernizing Wisconsin dairy industry is not only sound economic development, it's the right thing to do.

MIKE KRUTZA

President & CEO of Farm Credit Services of North Central WI

FCS is one of four Farm Credit Services in Wisconsin with assets of \$245 Million and loans and financial services to 3,500 farmers. Counties served are Portage, Wood, Waushara, Forest, Langlade, Price, Taylor, Oneida, Vilas, Marathon, Clark and Lincoln.

Mike has held various positions in FCS since 1973 and has been CEO of FCS NC WI since 1988.

Other Responsibilities:

- ◆ Director of Wisconsin Federation of Cooperatives
- ◆ Director of Rural Economic Development Board, Dept. of Commerce
- ◆ Past Co-Chairman of Gov. Dairy 2020 Council in 1996

AgriView

Study: Keeping Up With Inflation Cow Numbers Must Grow to Keep Pace

By Jane Fyksen
Regional Editor

Does it seem like you just can't get ahead, even though you're doing a better job with those cows today than 10 years ago? It might be true.

Dairy farmers – even those with better-than-average management – will need to boost cow numbers 60% over the next 10 years just to maintain their same standard of living. That's according to an Ohio State University analysis that discovered that producers need to expand their herds by 60% every 10 years to keep pace with inflation. Those wanting to do better than just tread water will need to increase herd size even more rapidly.

Factors driving this need to expand 60% every decade are net incomes per cow, inflation, and progressive income taxes, says Jim Polson, Wooster, Ohio, a farm management specialist covering 18 counties. (Polson doesn't suspect that the financial picture is much different in the Upper Midwest.)

He and ag economist Gary Schnitkey examined 40 years worth of New York dairy farm records going back to the mid-1950s. Accumulated by Cornell University, they are the largest, longest and most consistent set of dairy records kept in the U.S. – on 350 to 500 above-average dairies each year.

New technologies adopted
The operations the two researchers looked at have

kept pace with changes in the industry, for the most part, adopting new technologies (like total mixed rations and bovine growth hormone) as they were introduced.

For instance, herd size increased from 88 cows in 1983 to 130 10 years later. Milk production went from 15,264 pounds per cow to 18,858 over the same time. "To increase net income per cow over time, farmers have increased the number of animals per farm, improved management, adopted technology and increased production per cow," says Polson. He adds that the net incomes examined reflect actual size and productivity gains on dairy farms.

Between 1956 and 1993, nominal net incomes per cow increased an average of only \$6 per year. ("Nominal" means they haven't been adjusted for inflation and don't include income tax payments.)

While nominal incomes per cow have gone up, Polson points out that inflation "dramatically" reduced the purchasing power of a dollar. Back in 1960, 21¢ bought the same item as \$1 in 1993. (Inflation rates were the highest between 1974 and '82, averaging over 8%. Between 1983 and '93, inflation averaged 3.6% a year.) He says inflation's steady erosion of the amount a dollar can purchase has had a greater impact on a farm family's living standard than trends in commodity prices have.

As noted, nominal net income per cow doesn't consider inflationary impacts. "We used the gross national product/implicit price deflator to "deflate" those numbers so we could see the trend in purchasing power per cow,"

Polson explains. "The trend in real or 'deflated,' net incomes per cow differs from the nominal net income trend. Since 1965, real income per cow trended down by an average of \$28 per year." (In recent years, these New York farms have been netting an average of \$350 a cow.)

That means a dairy farm's real income would have declined even if productivity gains matched those of farms in the Cornell summaries – and herd size did not increase. The researchers looked at the expansion necessary to maintain the same real, before-tax income – given that productivity gains matched those in the Cornell summaries. Since 1965, individual herds had to increase cow numbers 50% each decade to have stable real income before paying income taxes.

Income tax is the second factor fueling the need to expand. "Income tax rates are progressive, meaning they go up as income goes up. Hence, a 50% increase in income before tax results in less than a 50% increase in after-tax income," says Polson. He looked at a family of four and the federal and Ohio state taxes, as well as self-employment (Social Security) taxes, for different herd sizes and income levels.

Polson notes that cull cow income is capital gains and not subject to self-employment tax. The Cornell summary showed cull cow income ranged from 5.6% to 6% of net farm income.

Of course, as net income before taxes goes up, the percentage going to taxes does, too. At \$20,000 net income, this farm family of four paid \$1,352 in taxes, or 6.76% of net income. When net income before taxes goes

up 50% to \$30,000, taxes increased to \$3,360 and take 11.2% of income. "Due to progressive income tax rates, the 50% increase in before-tax income increases after-tax income by only 43%. In order to increase income after tax by 50%, this dairy producer needed to increase net income before taxes by 60%, to \$32,000," Polson explains.

A similar impact occurs at other income levels, he remarks. A producer with a \$60,000 net income before taxes would have after-tax income of \$48,852. He'd need to increase net farm income before taxes by 66%, to \$100,000 to increase net income after tax by 50%.

"Thus, we conclude that a dairy farm family with better-than-average management must increase the number of dairy cows on their farm by approximately 60% every 10 years in order to maintain the same standard of living," Polson sums up.

He concedes that at higher incomes it's common to have more than one family involved, to incorporate, or to make other adjustments that may cut taxes. "These changes may result in lower taxes at the time of adoption. However, tax rates are still generally progressive for the new entities. Therefore, future increases in herd size and income will still face progressive tax rates."

Polson says there are "several economic reasons to expand." One is to maintain or increase real income. "It is highly likely that the 60% expansion per decade required in the past will continue to be required in the future," he says, again stressing that those for whom bettering their standard of living is an important

objective will need to plan for even faster growth.

"Another reason is to capture economies of size," he says. Recent Cornell data show that farms with 250 to 400 cows or more produce milk at a lower cost per hundredweight and have higher labor and management income per operator than smaller farms. Net income per cow increases as herd size moves up to around 75 cows, he adds, but is relatively constant as herds get larger.

Planning for a 60% increase in cow numbers every decade brings with it "many management challenges," says Polson. "With the necessity of continual growth in cow numbers, every current change must provide for and anticipate future changes." What's more, as producers gain size, they generally move from doing the physical work to managing employees, and then even to delegating responsibility to other managers who see that the physical work gets done. Bigger dairies mean increasing specialization of "middle management," with "upper management" (the owners) "more and more removed from physical labor," the two researchers point out.

A lot of dairy farm families would like to make the necessary changes, but can't.

"Unfortunately, these families often make many sacrifices, endure much pain and considerable suffering as they struggle to stay on a dairy farm that is less and less able to support their farm family, due to their inability to adopt new technology and grow in order to maintain income per cow and offset the impact of inflation and

taxes," says Polson. "Unfortunately, every year, additional dairy farm families become economically stressed because they haven't made the adjustments necessary to offset the forces at work in our economy."

There are, of course, other ways to maintain family living, and for dairy farms not expanding to counteract declines in real income. One is for someone in the family to get an off-farm job. Others will strive to increase per-cow incomes and increase productivity faster than average. (Their estimates of needed expansion are based on average productivity gains, remember.) However, Polson says the fact of the matter is there's "a limit on how much income you can get out of an individual cow."

More dairy farmers will go to grazing as a way to slash input costs. Or, notes Polson, they should consider making off-farm investments "to provide funds for future family living as real after-tax income from the dairy enterprise declines."

Polson says Schnitkey and he aren't suggesting that expansion is the only way to maintain income. However, it's an important one, they say, and "often is the only alternative if the family wants to get all their income from the farm."

"We aren't trying to make friends or enemies," he concludes, "just let people know

Economic value of farms underrated, says researcher

By: Judy Wiff

RIVER FALLS - Most communities would benefit more by encouraging farming than by trying to attract outside industry, said Dr. Larry Swain of the Rural Development Institute.

Surveys of spending patterns show families in medium-sized cities and villages spend 54 percent of their money locally. Owners of moderate-sized farms, on the other hand, spend 75 percent of their money locally.

Using a multiplier formula that accounts for the number of times money is spent and respent in a community, Swain figures the value of a family's \$40,000 income to the community is \$86,000. A moderate-size farm, with a gross income of \$200,000, is worth \$520,000 to the community, said Swain.

That single farm has a local economic impact equal to 8.3 households, he concludes. "To replace one farm, it's going to take eight \$40,000 incomes."

Swain bases his findings on surveys done in 18 communities from Duluth, Minn., to south of Madison. The telephone surveys—which included residents in Ellsworth, Hudson and River Falls—were completed in 1996 and are being evaluated now.

Swain said residents of large metropolitan areas tend to spend more of their income in their own cities, and owners of large farms spend more outside their communities.

"The larger farms don't spend as much in the community as the smaller farms do," said Swain. "That's one reason it's very important to encourage a lot of small farms."

"It's very important for economic developers to look at development from within first, and unfortunately that's not what they usually do," said Swain.

When a large company builds a plant in a community, the owners seldom move in. Therefore, said Swain, the company's profits leave the community.

Such companies may bring more jobs and more employees. Ideally, those jobs and workers would add to the tax base and lower local taxes.

"That never happens economic development always results in increases in taxes," said Swain.

The factory itself might add to the tax base, but the growth in population adds to the demand for roads, schools and police and fire protection and actually increases municipal costs, said Swain. "That evidence is pretty solid."

"In many communities, that is an economic drain on the community," said Swain. "You can actually destroy a community that way by doing the wrong kind of economic development."

Instead, he suggests encouraging development from within the community. "We'd be much better doing that the profit stays here."

"There may be some good reasons for doing some economic development, but it's the way we do it that has not always been in the best interest of the communities," said Swain.

He suggests encouraging local development first, building on the agricultural base by developing regional processing or packaging plants and helping small farms to be successful.

"There's been a saying for years and years: 'When farmers prosper, everybody prospers'," said Swain. "Farmers spend their money."

RICHARD W Hughes
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4-April-2001

I wish to thank the Joint Finance Committee for allowing me to testify. My name is Richard Hughes, I am a Dairy Farmer from southwestern Taylor County. I have been practicing managed grazing since 1993. I am here to support the grant for funding the Wisconsin Grazing Lands Conservation Initiative.

I am proud to say I am part of the most productive group in the entire world, the American Farmer. We are the envy of the world in this respect. Part of the reason for this is the diversity in agriculture we find across our nation. In Wisconsin, much of our land is not suited to continuous row crops because of soil type, topography, or climate. We have a relatively shallow layer of topsoil. As farmers it is our duty to conserve this valuable, non-renewable resource. We didn't inherit the land from our forefathers, we are simply borrowing it from our children. With this in mind, I believe grazing is an excellent tool for soil conservation.

(2)

Continuous grass is an excellent system for cattle. It minimizes or eliminates application of chemical insecticides, herbicides and fertilizers so prevalent with row crops. It also provides excellent feed for the production of milk or meat. There is no system of farming that is better at controlling erosion or run-off into our streams and waterways.

Grazing is a system of farming that is excellently suited to our conditions here in Wisconsin. It is an age old system that does and should continue to benefit from current research and technology.

I am proud to be among this most productive group of professionals on Earth. As I said we are the envy of the world. All the statesmen, scientists, teachers, and Captains of Industry cannot begin to match the productivity of the American Farmer. Our abundant production of food allows others to pursue other endeavors. We all have a stake in conserving these valuable resources. I urge you to support the Wisconsin Grazing LANDS Conservation Initiative.

Thank you,
Richard W. Hughes
Richard W. Hughes

WISCONSIN CITIZEN ACTION



Wisconsin's Largest Public Interest Organization ♦ Representing 53,000 individual members and 250 affiliate organizations
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Support Senator Burke's Family Farm Protection Act Budget Amendment

The proposed Family Farm Protection Act is designed to:

- Level the playing field so small to moderate sized family farms – the majority of Wisconsin farms – can be economically viable
- Ensure adequate environmental protection and healthy rural communities
- Invest in a future for Wisconsin family-farms including low interest loans, low-cost strategies for modernization and expansion and the development of new agricultural enterprises, new products and an aggressive marketing effort for Wisconsin grown products.

Key Budgetary Components:

(see reverse for dollar amounts)

- a) Fund UW-PATS to study the degree of concentration in the dairy, livestock and grain industry and its impact social and economic impact on family farm agriculture and rural communities.
- b) Create a position in the Department of Justice to investigate and enforce anti-competitive practices in agriculture and ensure compliance with and enforcement of discriminatory pricing prohibitions.
- c) Increase DATCP Agriculture Development and Diversification grant program that promotes new markets and new uses.
- d) Establish DATCP "Buy Wisconsin" Market Development Program.
- e) Establish DATCP cost-share program for transition to managed intensive grazing and organic systems of livestock production.
- f) Increase funding for the Small Business Health Insurance Pool, enabling farmers and other small business owners to join in a pool and gain the purchasing powers of larger corporations.
- g) Establish a low-interest revolving loan program for farmers who are implementing new farm enterprises and/or developing businesses that add value and build markets.
- h) Provide cost share funding for state and federal required nutrient management plans, certification and crop insurance programs.

For more information, please contact:

Sam Gieryn, Citizen Action Family Farm Stewardship Campaign Coordinator
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Family Farm Protection Act - Fiscal Summary

Proposed Program	Annual Cost
I. Anti Competitive Practices	
a. Research, University of Wisconsin, Impacts of Concentration	500000
b. DOJ staff for anti-trust enforcement, compliance/enforcement of volume pricing practices	1000000
II. Price and Market Reform	
a. DATCP staff: analyze price reporting records, create dairy price reporting & anti-price discrim. system, develop criteria for ag production contracts	350000
III. Farm and Rural Business Development	
a. Increase DATCP ADD program	500000
b. Establish DATCP "Buy-Wisconsin" Local Market Development Program	1000000
c. Increase UW-CIAS farmer-research grants and outreach on managed grazing and organic dairying systems	300000
d. Increase UW Center for Dairy Profitability research on low-capital strategies for improving profitability	50000
e. Establish DATCP cost-share program for managed grazing and organic systems of production.	2000000
f. Sustainable Woodlot Initiative	250000
g. Increase University of Wisconsin short-course for beginning dairy and beginning market gardener program	75000
h. Increase funding for Small Business Health Insurance pool	400000
IV. Credit and Financing Reform	
a. Farm Entrepreneur Micro-Loan Revolving Fund	2000000
V. Environment	
a. Cost share for nutrient management practices	3000000
b. DNR WPDES enforcement - increase fees to cover costs	250000
c. DNR study - options to, and phase out of, liquid animal waste handling	50000
Total	\$10,060,000

WISCONSIN CITIZEN ACTION



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Please Support Senator Burke's Family Farm Protection Act Budget Amendment

The Loss of Farms Threatens Wisconsin's Economy:

- Twenty-five percent of our jobs are related to agriculture, food processing or retail.
- We are rapidly losing our farms because of low commodity prices and a lack of economic opportunities for farmers.
- Consumers still want quality food grown on Wisconsin's family farms.

The proposed Family Farm Protection Act is designed to:

- Level the playing field so small to moderate sized family farms – the majority of Wisconsin farms – can be economically viable
- Ensure adequate environmental protection and healthy rural communities
- Invest in a future for Wisconsin family-farms including low interest loans, low-cost strategies for modernization and expansion and the development of new agricultural enterprises, new products and an aggressive marketing effort for Wisconsin grown products.

Key Budgetary Components:

(see reverse for dollar amounts)

- a) Increase the DATCP Agriculture Development and Diversification grant program that promotes new opportunities to expand markets and demand for farm products, add value, increase farm income, create jobs or enhance rural communities..
- b) Establish DATCP "Buy Wisconsin" Market Development Program to promote family farm products in local and regional markets and encourage state schools and other institutions to purchase directly from Wisconsin farmers.
- c) Establish DATCP cost-share program for transition to more profitable managed intensive grazing and organic systems of livestock production.
- d) Increase funding for the Small Business Health Insurance Pool, enabling farmers and other small business owners to join in a pool and gain the purchasing powers of larger corporations.
- e) Establish a low-interest revolving loan program for farmers who are implementing new farm enterprises and/or developing businesses that add value and build markets.
- f) Provide cost share funding for state and federal required nutrient management plans, certification and crop insurance programs.
- g) Fund UW-PATS to study the degree of concentration in the dairy, livestock and grain industry and its social and economic impact on family farm agriculture and rural communities.
- h) Create a position in the Department of Justice to investigate and enforce anti-competitive practices in agriculture and ensure compliance with and enforcement of discriminatory pricing prohibitions.

Family Farm Protection Act - Fiscal Summary

Proposed Program	Annual Cost
I. Anti Competitive Practices	
a. Research, University of Wisconsin, Impacts of Concentration	50000
b. DOJ staff for anti-trust enforcement, compliance/enforcement of volume pricing practices	46700
II. Price and Market Reform	
a. DATCP staff: analyze price reporting records, create dairy price reporting & anti-price discrim. system, develop criteria for ag production contracts	75000
III. Farm and Rural Business Development	
a. Increase DATCP ADD program	500000
b. Establish DATCP "Buy-Wisconsin" Local Market Development Program	1000000
c. Increase UW-CIAS farmer-research grants and outreach on managed grazing and organic dairying systems	400000
d. Increase UW Center for Dairy Profitability research on low-capital strategies for improving profitability	50000
e. Establish DATCP cost-share program for managed grazing and organic systems of production.	2000000
g. Increase University of Wisconsin short-course for beginning dairy and beginning market gardener program	75000
h. Increase funding for Small Business Health Insurance pool	400000
IV. Credit and Financing Reform	
a. Farm Entrepreneur Micro-Loan Revolving Fund	2000000
V. Environment	
a. Cost share for nutrient management practices	2500000
b. DNR WPDES enforcement - increase fees to cover costs	218000
c. DNR study - options to, and phase out of, liquid animal waste handling	50000
Total	\$9,364,700

David + Marilyn Mayenschein
N10473 Dickerson Ave.
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North-Central Grazing
Network

I am Marilyn Mayenschein. My husband, Dave and I are dairy farmers and we have been farming in the Town of Butler in Clark County for the past 25 years.

Today I am testifying on behalf of the Wisconsin Grazing Initiative.

In 1997, when we first heard about grazing, we were conventional farmers - raising our own corn and alfalfa and green chopping daily to feed our herd all summer. We were struggling financially and prospects for the future looked pretty grim. And since our son, Mike, was not interested in farming there seemed no reason to continue the fight. We were close to calling it quits.

Then we decided to give it one more try with Management Intensive Grazing (M.I.G.). We contacted our County Land Conservationist and he helped us apply for the Federal Cost-sharing E.Q.I.P. program. The money we received allowed us to get our fences and watering system up right away the first year.

We are now about to begin our fourth year of grazing and what a difference it has made!!

Our cost of production is down enough so that even in these times of record low milk prices we are still profitable. In the past we often ran out of hay before winter was over. Now that we have quit planting crops and turned all our fields into pastures, we have surplus hay left over each spring. We now buy our Corn from other farmers. And since we no longer plow or plant crops - we no longer buy seed fertilizer, chemicals and only $\frac{1}{4}$ the diesel fuel.

Also, because we don't plow and our land is in permanent pastures, erosion is not a problem. Six months of our manure is now deposited naturally by the cows while grazing, thus preventing runoff. This natural fertilization increases organic matter in the soil and reduces or eliminates the need for chemical fertilizer.

We are now happier and enthusiastic about farming and the future. And perhaps best of all, our son has now decided to make his living in farming and has come into the business with us mostly due to grazing.

Today you have the opportunity to help us spread the word about grazing here in Wisconsin. It is sustainable, profitable and environmentally sound. The Wisconsin Grazing Initiative requests \$400,000 annually for the next five years to provide research, education and technical assistance grant money for MIG. Also it will provide cost sharing to local farmers to help implement this practice. We need grazing if we are to continue to be America's Dairyland and to HELL with California!!

Thank you

RESOLUTION: GRANT FOR FUNDING THE WISCONSIN GRAZING INITIATIVE

WHEREAS, The Wisconsin Grazing Lands Conservation Initiatives's (GLCI) mission is to improve and expand the use of, grazing-based systems of livestock production on private land, that are practical and profitable for farmers, and foster environmental stewardship.

WHEREAS, The Wisconsin Department of Agriculture, Trade and Consumer Protection mission is to insure the efficient use of agricultural resources in a quality environment and also the vitality of Wisconsin Agriculture.

WHEREAS, The Wisconsin Department of Natural Resources mission includes the protection of our land and water, wildlife, fish and the ecosystems that sustain life and providing a healthy sustainable environment for current and future generations.

WHEREAS, The use of Management Intensive Grazing (M.I.G.) has been proven to be profitable, provides for a quality lifestyle and has proven to be the most cost effective Best Management Practice available to farmers in Wisconsin to reduce soil erosion, barnyard runoff, pesticide application, energy use, manure storage needs, while increasing wildlife habitat.

WHEREAS, The United States Natural Resources Conservation Service (NRCS) has recognized the benefits of M.I.G. and currently provides up to \$385,000 annually for Grazing land technical assistance and educational projects in Wisconsin.

WHEREAS, There is a demonstrated need to provide further assistance on research, education and technical assistance about M.I.G. to Wisconsin's livestock farmers, especially to the 50% of new farmers who are projected to implement M.I.G. as a management option.

NOW, THEREFORE BE IT RESOLVED, that the Wisconsin Grazing Land Conservation Initiative respectfully requests that the Wisconsin Department of Agriculture, Trade, and Consumer Protection to include at least \$400,000 annually in it's budget for at least the next five years to provide research, education and technical assistance grant money for M.I.G. in Wisconsin. The grant money is requested to be administered through the Multi Agency Land and Water Education Grant Program or a similar grant program.

BE IT FURTHER RESOLVED THAT, the Wisconsin Department of Agriculture, Trade and Consumer Protection and the Department of Natural Resources encourage counties to include M.I.G. as high priority practice in their Land and Water Resource Management Plans and to provide cost sharing to local farmers to implement the practice, since the plans are at least partially funded with Department funds.

Unanimously Approved by the Wisconsin Grazing Land Conservation Initiative on July 18, 2000

Richard & LuAnn Newton
W1055 Cty W
Edgar, WI 54426

Central WI River Grazing Network

I am LuAnn Newton & Along with my husband Richard, we ~~we~~ have a 100 cow dairy farm which we manage intensive graze. We bought our current farm with the intention to graze our herd and had hoped to become profitable after 5 or 6 years. However that was not the case. We became profitable after the 1st year.

The first year at this farm we signed up for the EQUIP program to help put in lanes, fences & water systems. The program helped us to be up & running the 1st year which greatly influenced why we made a profit the 1st year. We also made good use of the knowledge of our local grazing conservation specialist who is partially funded thru the ~~the~~ GLCI.

So In Summary We would like to see the Finance committee fund the ~~the~~ WISCONSIN GRAZING INITIATIVE.

Thank you!

Hi my name is Joe Tomandl. Together with Kevin Paul and Joe Jr., we represent the North Central Grazing Network. We are dairy farmers; we produce milk by rotationally grazing our cattle. We are here this morning to ask for your support and funding of the Wisconsin Grazing Initiative.

Despite record low milk prices, we are profitable; we enjoy a good standard of living and enthusiastically look forward to the future of dairying in Wisconsin! The key to our enthusiasm and success is intensively rotational grazing.

The dairy industry in Wisconsin has faced much turmoil and difficulty in the past years. Major problems confronting the industry include:

- 1) Lack of profitability
- 2) Environmental issues/ non point pollution regulations
- 3) Lack of young people entering the business
- 4) Labor difficulties
- 5) Spiraling costs of equipment, repairs, maintenance, energy etc.
- 6) Long hours/ dangerous
- 7) Lack of export markets
- 8) Farmer/ Rural resident conflicts
- 9) Wisconsin loses 1000 farms each year

What has been done in Wisconsin to solve problems?

We appreciate the efforts made by the Department of Agriculture, the UW System, the Department of Commerce and it's Dairy 20/20 Program to ease these problems. But their answer to these problems seems to be large confinement dairy farms based on the California model. In our opinion this solution is misguided, shaped more by commercial interests than the interest of the farmers that run them.

For instance, the Dairy 20/20 Program has spent 1.6 million tax dollars to encourage expansion and quotes modernization of 600 dairy farms. A good portion of the ¾ billion dollars invested by farmers is through taxpayers subsidized and guaranteed interest loans. And do you know what? Not one of these large taxpayer supported factory farms are efficient enough to produce milk at the world market price of \$8-\$9.00 per hundredweight!

Now we're not against large farms per se, because large hog farms produce the world's most inexpensive pork and large efficient poultry operations produce the world's least expensive meat and eggs. But large confinement dairy farms don't even come close to world efficiencies of milk production.

The world's model of efficient milk production is not confinement dairies; it is Rotational Grazing farms. Leading the way is New Zealand, Australia, and parts of Ireland. Large dairy industries are sprouting up in Argentina and Brazil. Do you think they are large confinement dairies or grass based? You guessed it, GRASSED BASED!

Recent studies have shown that over 20% of dairy farmers practice some form of rotational grazing.

WHY?

No other system of milk production besides rotational grazing eliminates or greatly reduces the problems associated with Wisconsin's dairy problems that we listed earlier.

For Instance:

- (1) Lack of profitability
- (2) Environmental issues/ non-point pollution regulations
- (3) Lack of young people entering the business
- (4) Labor difficulties
- (5) Spiraling costs of equipment, repairs, maintenance, energy etc.
- (6) Long hours/ dangerous/ family life
- (7) Lack of export markets
- (8) Farmer/ Rural resident conflicts
- (9) Wisconsin loses 1300 farms each year

Wisconsin has the God given resources to produce more milk on grass than New Zealand. A temperate climate, with long summer days, adequate rain and fertile drought resistant soils is what made Wisconsin America's Dairy land. It's the same things that can make Wisconsin the World's Dairy Land! Wisconsin is at a crossroads in dairy production, and we need your help. Are we going to be a world player or are we going to continue building inefficient dinosaurs with 13-acre cesspools dependant on large infusions of foreign labor and taxpayer money?

The Wisconsin Grazing Initiative is a small investment that will pay huge dividends in our rural economy, protect our environment, and maintain the independence of our family farmers.

We must get started soon. So we are asking your support for the Wisconsin Grazing Initiative and we thank you for your time.

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**The Real Reason NSP n/k/a XCEL Energy
Wants Budget Bills 3009 and 3866 Passed:**

**NSP n/k/a XCEL Energy Does Not Provide
Adequate Service and/or Facilities to Many
Dairy Farm Customers.**

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OVERVIEW

In November 1999, a unanimous jury in Hudson, Wisconsin determined that stray voltage from Northern States Power Company n/k/a Xcel Energy damaged the Schachtner Farms' dairy operation. The jury also concluded NSP wilfully, wantonly and/or recklessly failed to provide reasonably adequate service and/or facilities. Schachtner Farms v. NSP, St. Croix Co. Case No. 97 CV 118.

In response to this jury verdict, Xcel Energy has requested Governor McCallum to include in his budget a provision which would shield utilities from liability in stray voltage lawsuits and another provision which would preclude an award of treble damages even if a utility wilfully, recklessly, and/or wantonly failed to provide adequate service and/or facilities to its customers.

Under Section 3866 of the 2001 Budget Bill, Xcel Energy has asked lawmakers to grant it immunity from damage it causes dairy farmers. Under this proposal, Xcel Energy can avoid liability if its own testing on one particular day does not reveal electrical measurements over the level of concern contributed by Xcel's primary system. This proposal ignores several key elements. It ignores the fact that voltage levels can change on a daily and even hourly basis. It ignores the fact that Xcel Energy's own testing can be self-serving and biased. It ignores the fact that there are many qualified experts available to conduct testing on the farmer's behalf, testing which would not even be considered relevant under the current proposal. It ignores the fact that a utility can still cause damage to livestock under certain conditions even though that utility may technically be in conformance with one provision of the Public Service Commission's order. Perhaps most important, it ignores the fact that if this proposal is enacted into law, it will lower the bar regarding the quality of service and facilities public utilities provide.

Because Xcel Energy is given a license by the state to supply electricity, it has the duty to deliver that service safely for animals and humans. Xcel Energy is supposed to be in the business of providing useable, safe, and non-harmful electricity to its customers. Xcel Energy is not supposed to be in the business of lobbying to limit its liability when it shirks its responsibility to provide suitable service and facilities to its dairy customers.

The purpose of this packet is to respond to Xcel Energy's letter of March 12, 2001, (written by Mr John D. Wilson, Vice President, Regulatory and Public Affairs) by providing a clear picture of the facts in the Schachtner Farms case and outline exactly why the jury found that Xcel Energy caused damage to the Schachtner Farm in a willful, wanton and reckless manner.

I. WHAT IS STRAY VOLTAGE?

The basic law of electricity is Ohm's law, which says that voltage(V) equals current(I) times resistance(R) ($V=I \times R$). Stray voltage or extraneous voltage is an "out of place" voltage or voltage that "strays" from where it should be, and shocks a cow. It is actually the current, not the voltage, that produces the shock sensation in animals and humans.

In Wisconsin, utilities supply electricity to a dairy farms from substations. From the substation, the primary or "hot" line carries voltage to the farmer's transformer where it is "stepped-down" to usable electricity. Also at the transformer, the utility neutral conductor "return conductor" is directly bonded to the farm's neutral and grounding system. The utility neutral is designed to carry current back to the substation. All current that comes from a substation returns to its source.

The source of stray voltage problems can be on-farm wiring or off-farm (utility distribution system). When the primary (utility) system is not properly balanced, is not adequately grounded, has poor connections, or otherwise has high resistance on the return system, stray voltage can result. Because the primary and farm grounding systems are interconnected to all piping and metal work in the barns and yards, when voltage is imposed on the farm from the primary neutral, problematic current in cow contact areas may result. Kolpin v. Pioneer Power and Light, 162 Wis. 2d 1, 469 N.W.2d 595 (1991); Vogel v. Grant-LaFayette Electric Cooperative, 201 Wis. 2d 416, 548 N.W.2d 829 (1996).

II. BACKGROUND OF SCHACHTNER FARMS v. NSP.

A. Case History.

The Schachtner operate a family dairy farm in the town of Deer Park, St. Croix County, Wisconsin. The Schachtner farm suffered from milk production problems and problems with the health of their dairy animals which experts linked to stray voltage coming from their electrical supplier, Northern States Power ("NSP"). Schachtner farms brought suit against NSP and asserted causes of action based on negligence and nuisance. (R. 2)¹. The Schachtners also claimed entitlement to treble damages pursuant to Wis. Stat. 196.64. (R. 12).

¹ References to R#, refer to the trial court record entry number. References to App#, refer pages of the appendix contained herein, which contain either trial testimony transcripts or exhibits which were received at trial.

The matter proceeded to trial in the Circuit Court for St. Croix County. A jury trial was held from November 2, 1999 to November 23, 1999. The jury rendered its verdict finding NSP causally negligent and determining that NSP failed to provide reasonably adequate service and/or facilities in a willful, wanton, or reckless manner. The jury found the Schachtners not negligent. The jury determined economic damages to be \$850,000.00 and damages for the inconvenience, annoyance, and loss of use and enjoyment of their property due to stray voltage to be \$200,000.00. (App.351-353).

B. Chronology of the Schachtners' Stray Voltage Claim.

The partners of Schachtner Farms are John, Terese, Richard, and Elaine Schachtner. John and Richard's parents moved to the Deer Park farm from Iowa in 1953 when John and Richard were young boys. (R.391:14-15). In the late 60's, John and Richard's father passed away and the two brothers took a more active role in the farm. (R.391:23-24).

Richard Schachtner testified that they were not satisfied with milk production in the 1980's. (R.391:37). The Schachtners tried many different things to improve milk production, however, the changes had no lasting impact. (R.391:37-52). The Schachtners would visit other farms and the cows on those farms seemed comfortable and did not dance. (R.391:49). In contrast, on the Schachtner farm, the cows would not stand still. (R.391:49).

NSP conducted stray voltage investigations within seven circuit miles of the Schachtner farm beginning in the early 1980's. (R.391:12). In 1987-88, the Schachtners' neighbor (.8 mile away), Mr. Thomas Dalton had a concern about stray voltage and contacted NSP. (R.388:60,62). Mr. Dalton was on the same NSP service line as the Schachtner farm. (R.388:59-60).

NSP came out to the Dalton farm, took test measurements, and found over .5 volts in cow contact. (R.388:62,63; R.400:4). NSP informed Mr. Dalton that his problem was not an on-farm problem, and NSP isolated² Mr. Dalton's farm on March 15, 1988. (R.388:64,73).

After isolating the Dalton farm, NSP's own policy required it to check the

² The primary and secondary neutrals are normally connected. "Isolating" a farm is designed to sever this connection of the primary and secondary neutral and is one of the ways to prevent stray voltage coming from the primary neutral. (R.390:116; R.386:179-180,182-183,186).

Schachtner farm (neighboring farms) to see what impact isolation had on other farms. (App.354). NSP did not follow its own policy. NSP did not contact or check the Schachtner farm. (R.390:118-120; R.394:168-169).

In 1993, Richard convinced John they should check for stray voltage and they contacted NSP. (R.391:53). Dennis Leuhman, an NSP employee, came out and tested and told the Schachtners there was nothing seriously wrong. (R.391:55). Mr. Leuhman did not leave copies of his tests with the Schachtners. (R.391:55). At trial, Brian Guenther, NSP's NEV Supervisor, agreed that the 1993 tests indicated a milliamp of current in cow contact for at least some of the cows. (R.400:4-5).

In July of 1995, Robert Reininger, an AMPI Representative, was at the Schachtner farm and checked the neutral current at the service entrance panel. (App. 403-410). With the whole farm shut off (disconnect pulled), he measured 1.5 amps which was "abnormal" "too much". (App. 409-410). That current would "have to be coming from the utility". (App. 407).

Mr. Ernie Walters, a certified master electrician, agreed the current Mr. Reininger measured would be coming from NSP's distribution system. (R.388:146). Mr. Brian Guenther, NSP NEV Supervisor, agreed that if this measurement was taken correctly, it would indicate an abnormal condition. (R.400:54).

NSP again tested the farm 12-20-95 and found 13 milliamps on the water line with the farm power turned off. (R.391:180). NSP also tested at the farm on 12-27-95 and 12-29-95. (R.391:61-65). Mr. Guenther agreed that in December of 1995, there was more than a milliamp of current in cow-contact areas for some periods of time. (R.400:6).

Mr. Don Woychik went to the Schachtner farm in January of 1996. (R.387:12). Don Woychik is a farmer, stray voltage consultant, and retired electrician who had previously trained licensed electricians and whose background was in farming and in livestock facilities. (R.386:158-160,168-170,175-176). In the past, Mr. Woychik has helped put together an educational video explaining stray voltage, and has jointly presented stray voltage seminars with representatives of NSP. (R.386:171-172).

In 1987, Mr. Woychik was appointed to the first Wisconsin Stray Voltage Task Force. (R.386:174). Mr. Woychik defined stray voltage as voltage in an area that is unwanted or unacceptable. (R.386:177). The effects of problematic stray voltage include: irritated cattle, rough coats, mastitis problems, decreased milk production, and conception problems. (R.386:176-177; R.387:64,190-192).

When Woychik was on the Schachtner farm in January 1996, he made the observation that something was bothering the cows. The cows were “fearful” and reluctant to go into the milking parlor. (R.387:28). The Schachtners had to help their cows into parlor. (R.387:28). The Schachtner cows had rough-hair coats and he was concerned about the cows’ water intake. (R.387:28-29).

Woychik’s tests at the Schachtner farm in January 1996, revealed .55 volts - .6 volts, steady state, at cow contact. (R.387:34-40). Mr. Woychik took stray voltage measurements in January of 1996 with a 470 ohm resistor. (R.387:33). Mr. Guenther agreed that if a resistor was used, cow-contact voltages were over 1 milliamp in January of 1996. (R.400:7). Mr. Woychik said that the next step was to find the source of the problem. (R.387:43). He found numerous wiring problems on the farm, however, he found no short circuits or leaks. (R.387:43-51). The next step was to perform a load-box test. A load box test is designed to determine what portion of cow contact voltage is coming from the utility. (R.386:188-189).

Mr. Woychik performed a load-box test at the Schachtner farm on February 19, 1996. (R.75:5). Mr. Leuhman, NSP representative, was invited out to the farm to observe Woychik’s testing. (R.400-21-22). During Woychik’s load box tests, Leuhman admitted seeing readings which would correspond to over one milliamp in cow contact. (R.400:7; R.387:49-50).

On February 19, 1996, Mr. Woychik discussed the situation with NSP personnel, and Mr. Woychik left the farm with the understanding Mr. Leuhman was going to go back to his peers and would remedy the problematic situation. (R.387:51). The problematic levels of stray voltage was coming from NSP and Woychik recommended isolation. (R.387:43-52,59-60). Richard Schachtner also testified that on February 19, 1996, Mr. Leuhman said there is “definitely a problem here”. (R.391:67).

NSP conducted their load box tests on February 20, 1996, and Mr. Leuhman told the Schachtners that NSP was going to change the primary neutral wire. (R.391:67-68). The primary neutral wire was never changed. (R.391:68). Additionally, for NSP’s load box tests, NSP chose not to use the same cow-contact measurements as Mr. Woychik had. (R.400:25-26).

In March of 1997, after the Schachtners received a letter from NSP denying their request for isolation, the Schachtners contacted Mr. Steve Lee. (R.387:76-78). In April of 1997, Mr. Lee, a state certified master electrician, installed an isolation transformer at the Schachtner farm. (R.388:100,109). Mr. Lee testified that he conducted stray voltage tests after the isolation transformer was installed and the stray voltage level went to zero.

(R.388:115). Both electricians, Mr. Lee and Mr. Walters have never run into a situation where isolation will mask on-farm wiring problems, if an on-farm problem exists, the problem will magnify upon isolation. (R.388:122,157).

Arlen Burke, farm business and production management teacher at Wisconsin Indianhead Technical College, testified about the farm conditions before and after installing the isolation transformer, and about how milk production and cow health and behavior began to improve immediately after the farm was isolated. (R.392:67-68,74-80,187-188, 194-200). Richard Schachtner testified about how the cows would now come into parlor by themselves, mastitis improved, and the cows sustained a longer lactation curve peak. (R.391:81-85). Before isolation, John Schachtner saw lots of cows lapping at the waterers, particularly in the summer of '95. (R.391:193-194). After isolation, the cows would drink normally; they would stick their nose in and suck the water. (R.391:194).

C. Plaintiffs' Experts and NSP's Own Personnel Testified that NSP's Electrical Distribution System Did Not Meet Wisconsin's Minimum Code Requirements and NSP Failed to Adequately Serve the Schachtner Farm.

Mr. Brian Guenther, NSP's NEV supervisor since 1992, agreed that it is NSP's responsibility to make sure that they don't distribute excessive amounts of stray current to farms. (R.397:184; R.389:15; R.400:3). Mr. Guenther admitted that NSP had never previously made measurements of the current flow on the neutral line that supplies the Schachtner farm. (App.402; R.389:32). NSP's engineers admitted that to resolve neutral-to-earth voltage problems, a visual inspection of the primary line will not get the job done. (R.389:18; R.389:9-10,14).

Mr. Guenther admitted that in 1988 NSP did not follow its own stray voltage policies. (App.354,400-403;R.389:45-49,51-56). Mr. Guenther agreed that NSP did not know what happened at the Schachtner farm. Nobody ever walked over to the Schachtner farm. It would have cost NSP next to nothing to have stopped at the Schachtner farm back in 1988. (R.400:32).

Mr. Guenther agreed that the grounding on NSP's line and the balance of the neutrals is critical to keep farm voltages down. (R.389:15-16; R.400:4). Mr. Guenther agreed that before 1988, NSP's distribution line serving the Schachtner farm did not have 9 grounds on each side of the Schachtner farm. (R.389:19; R.400:30). NSP's own policy states that code requires a minimum of 9 driven grounds per mile. (App.356-357).

Mr. Gerald Bodman, Agricultural Engineer, Professor Emeritus (pending), Department of Biological Systems Engineering at the University of Nebraska, has

consulted for both farmers and utilities in the past. (R.154;R.155;R.390:26-27,53-54). The Wisconsin Public Service Commission has endorsed Bodman's testing methodology. (R.390:244-246).

In this case, Bodman's own tests in September of 1996 did not show problematic voltage levels on the Schachtner farm. (R.390:54,83,96). However, the primary system is a very dynamic system and it is not uncommon to get low measurements one day and get higher measurements on another set of days. (App.361).

More importantly, **Bodman testified that NSP's own 1993, 1995 and 1996 tests did show problematic levels of voltage in the animal environment.** (App.362-364; R.158). **The source of the voltages was NSP's system.** (App.364,369-378; R.158). Professor Bodman also testified that after the isolator was installed, no problematic levels of voltage existed on the Schachtner farm. (R.390:138).

Regarding Mr. Reininger's tests in 1995, Bodman opined that NSP was contributing more than one milliamp of current flow at cow contact. (App.371-374). Bodman also testified that NSP was causing more than one milliamp of current flow in cow contact on the dates NSP was on the farm. (App.373-376,384-385; R.390:129-131). NSP did not perform the necessary tests to determine whether NSP was causing more than one milliamp in cow contact. (App.373-377). Despite this, NSP claimed it was not "causing more than one milliamp in the cow contact area". (App.359-360).

Bodman testified that prior to NSP's grounding upgrades in 1988 and prior to NSP's supply voltage upgrade in 1990, cow-contact voltages on the Schachtner farm would have been even greater than the voltages measured beginning in 1993. (App.363-364,384-385).

Further, Professor Bodman testified that after the neighboring Dalton farm was isolated, it would have been prudent to advise farmers within a mile of the Dalton farm for increased potential of problems. (App.382,384,389). This is because isolation of the Dalton farm will increase the voltage on the primary neutral that was providing electricity to the Schachtner farm. (App.379-381; R.390:80-82). In fact, after the Tom Dalton farm was isolated on March 15, 1988, the voltage on the primary neutral went from .55 volts to 3.5 volts. (App.381-382).

Professor Bodman also testified that the **grounding on NSP's system, as of Jan 1, 1998, did not meet Wisconsin's minimum code requirements and was not adequate to serve the Schachtner farm.** (App.387-388). NSP failed to provide adequate service to the Schachtner farm because of the inadequate grounding. (App.388-389). Bodman further testified on cross-examination that "[A] service that causes problems for a customer

who's buying electricity from a utility is inadequate." (R.390:244).

D. NSP Either Negligently or Intentionally Did Not Properly Conduct its Testing at the Schachtner Farm.

At trial, Mr. Guenther, NSP representative, admitted that based upon NSP's testing back in 1995, NSP should have conducted a load-box test. (R.400:21). However, NSP only conducted a load-box test in response to Mr. Woychik's tests. (R.400:21).

Mr. Guenther agreed that NSP's load box testing on 2-20-96 was critical in NSP's determination not to isolate the farm. (R.400:37). Despite this, there is not a single recorded measurement from any recording device to document NSP's load box tests. (R.400:37-38). NSP had the ability to use some recording testing equipment, however, the only documentation of the load box tests was from what the NSP representatives wrote down on a piece of paper. (R.400:38). Don Woychik *described how one can obtain lower cow contact readings if that is a persons intention*. (R.387:32-33,163-164).

Additionally, Professor Bodman also testified that NSP's 1993 tests under reported readings because of the erroneous calibration of NSP's meters. (App.363). Moreover, Bodman was generally critical of NSP's load box tests. (R.390:125-131). NSP's load box tests used about 50 percent of normal load, tested at the transformer pole instead of at the meter pole, and used a cow contact distance of over nine feet. (R.390:129-131,256-257; R.391:69-70).

Richard and John Schachtner also had concerns about NSP's testing. The Schachtner brothers described how Mr. Paffel, NSP representative, was at the truck where the recording equipment was and Mr. Leuhman, NSP representative, was in the barn setting up the cow contact points; the two would talk on walkie talkies and Mr. Leuhman would move the cow contact points until lower readings were obtained. (R.391:70-71,251-255).

III. NSP HAS A DUTY TO PREVENT STRAY VOLTAGE FROM DAMAGING ITS CUSTOMERS.

A. The Wisconsin Supreme Court Has Stated That an Electrical Utility Has a Duty to Prevent Stray Voltage from Damaging its Customers.

Electrical utilities have a duty to prevent stray voltage from damaging its customers. Kolpin, 469 N.W.2d at 608. Mr. Brian Guenther, NSP's NEV supervisor, agreed that it

is NSP's responsibility to make sure that NSP does not distribute excessive amounts of stray current to farms. (R.389:15; R.400:3). The law and common sense requires NSP to provide "a system that does not cause stray voltage problems to the customer". In this case, NSP did not even provide basic service.

B. NSP's Unfounded Contentions That it Complied with PSCW Orders Does Not Prevent a Jury from Determining NSP Was Negligent and Created a Nuisance.

NSP's argument is fundamentally defective. NSP is incorrect on multiple fronts when it asserts "the only basis for a negligence or a nuisance finding by the jury in this stray voltage case would be NSP's violation of PSCW orders." (NSP's appellate brief at 34). First, both Professor Bodman and Mr. Woychik testified NSP did violate PSCW Orders. (App.362-364, 373-376, 384-399).

NSP also erroneously argued that it complied with the 1989 PSCW Orders by claiming that according to its own tests, it did not contribute .5 volts to cow contact areas. This contention is flawed for several reasons. Not only did NSP did not comply with the 1989 PSCW Orders, NSP failed to properly determine in 1993, 1995, and in 1996, the level of voltage it was subjecting the Schachtner herd to.

Second, even if NSP had complied with the 1989 PSCW Orders, mere compliance with some minimum regulation does not preclude a finding of inadequate service. A fundamental tenant of Wisconsin Law is that mere compliance with any standard or statute will not insulate someone from liability. As our supreme court stated in Kemp v. Wisconsin Electric Power Co., 44 Wis. 2d 571, 579, 172 N.W.2d 161 (1969):

Of greater significance in this case is the well-established rule that the enactment of safety statutes or legislation giving a commission jurisdiction over a certain activity does not abolish the duty arising under common-law negligence ... a safety statute merely establishes a minimum standard of care and the conduct, event though sanctioned or in conformity with the statute, is not thereby necessarily relieved of conforming to the common-law requirements of ordinary care"

Third, and equally important, is the fact that had the PSCW never adopted a definition of inadequate service, a jury could have still found NSP failed to provide adequate service. NSP owes a broad duty to provide reasonably adequate services and facilities. Failure to comply with the 1989 PSCW Order is one way to prove inadequate service. However, arguing one complied with the 1989 PSCW Order, does not absolve a utility from liability if the utility is causing damage to the customer.

NSP's also erroneously claimed that it could not isolate the Schachtner farm. Contrary to this assertion, had NSP properly conducted their own tests or if NSP would

have accepted Woychik's tests, NSP could have isolated the Schachtner farm. Mr. Leuhman's memo, Exhibit 677, states "[W]hen Mr. Woychik performed his load box test cow contact did go over .5 volts with the load box and other farm load on." (R.387:48-50).

Not only was NSP's position that it "could not isolate" the farm erroneous; NSP's position conveniently misses the point. **Nothing precluded NSP from preventing stray voltage in the first place.** As Mark Cook, Manager of the Rural Electric Power Services Program for the State of Wisconsin, testified: there are many ways a utility can reduce cow contact voltage without isolating a farm, including increasing the conductor size and improving connections which lowers the systems resistance, and balancing the load which lowers the current. (R.399:102-104).

Mr. Guenther admitted that NSP had never previously made measurements of the current flow on the neutral on the line that supplies the Schachtner farm. (R.389:32; R.400:31). Mr. Duttee Holmes, principal engineer for NSP in 1986, agreed that in order to determine whether a distribution line is functioning properly, it requires more than a visual inspection and requires actual testing of the line. (R.389:9-10). If NSP has not inspected a section of line in over 20 years, NSP has not met its code requirements. (R.389:14). In this case, NSP never adequately tested its own system.

- C. **In Addition to NSP's Failure to Meet the PSCW Minimum Requirements by Failing to Properly Identify and Remedy the Schachtners' Stray Voltage Problem, NSP Also Failed to Provide Adequate Service Because its Grounding Did Not Meet Code and NSP Failed to Adhere to its Own Policies Designed to Deal with Stray Voltage Problems.**
1. **NSP's Failure to Have the Required Minimum Number of Grounds Constituted Inadequate Service and Inadequate Facilities.**

The Wisconsin State Electrical Code Order 1031 (B)(5)(c) (1960), Wis. Adm. Code PSC 114-96A3, and PSC Docket 106, p.16 (1989) all state that the Electrical Code requires nine ground rods per mile. (R.317:16). NSP, without proof and in self-serving fashion, has claimed that this provision does not apply to them. NSP's argument is not only erroneous but also disingenuous given the fact that NSP's own "stray voltage" policies (Exhibits 704, 705, and 725) require 9 grounds "to meet code" and NSP's policies talk about adding additional grounding as a means to try and eliminate stray voltage problems. (App.354, 356-358). **NSP cannot pick and chose what minimum requirements it wants to adhere to.**

Professor Bodman testified that NSP's grounding on 1-1-98, ten years after NSP added grounds in 1988, still did not meet Wisconsin's minimum code requirements and was not adequate to serve the Schachtner farm. (R.390:132-133). Mr. Guenther admitted that before 1988, NSP's distribution line serving the Schachtner farm did not have 9 grounds on each side of the Schachtner farm. (R.389:19; R.400:30). This lack of minimum grounding is important, as the PSCW states: "it is better to prevent a problem than to solve it after it has happened." (R.317:4).

Mr. Guenther agreed that the grounding on NSP's line is critical to keep farm voltages down. (R.389:15-16,57; R.400:4). Grounding is particularly important in this case because prior to NSP's grounding upgrades in 1988 and prior to NSP's voltage upgrade in 1990, cow contact voltages on the Schachtner farm would have been even greater than the voltages that were measured beginning in 1993. (App.363-364,384-385). Bodman testified that NSP failed to provide adequate service to the Schachtner farm because of the inadequate grounding. (App.388-389).

2. NSP's Failure To Follow Its Own Policies Constituted Inadequate Service.

Mr. Guenther admitted NSP did not follow its own rural line grounding program, Exhibit 704, which was designed to eliminate problematic stray voltage. (App.354,382-384,400-403). Mr. Guenther agreed that after isolating the Dalton farm, NSP did not know what happened at the Schachtner farm - no one ever walked over to Schachtner farm. It would have cost NSP next to nothing to have stopped at the Schachtner farm back in 1988. (R.400:32).

After the Dalton farm was isolated, NSP's program called for it to measure the NEV every one-third mile to see if it exceeded 1.5 volts. NSP never did this. (App.382-384; App.400-403). In fact, the only time NSP did measure the NEV on its line (at the Dalton transformer) the readings exceeded NSP's guidelines. (App.383).

NSP's program, Exhibit 704, also required NSP to check to see if NEV increases at neighboring farm transformers after one farm is isolated. (App.354,383). NSP never did the things its own program required. (App.382-384; App.400-403). Mr. Paffel, NSP representative, agreed that testing neighboring farms, meant within a mile or so of the farm that was isolated. (R.394:151,168-170).

Additionally, Exhibit 725, NSP's neutral-to-earth voltage (NEV) policy, was in effect when NSP isolated the Dalton farm. (R.389:51; R.320). That policy states that if cow contact voltages exceed .5 volts NSP would isolate the farm. (App.355-356). The

individual conducting the investigation for NSP of the Tom Dalton farm, did not follow its own procedures nor complete the tests that the policy required. (R.389:54-55; R.320). There is no documentation that anyone from NSP ever did what it was required to do, i.e., look for broken insulators, high resistance connections, splices, etc. (R.389:56; R.320:15).

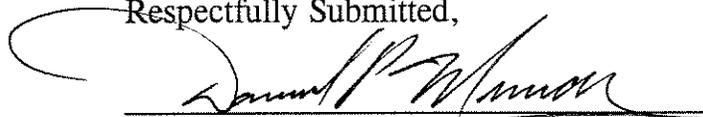
NSP's blatant disregard of its own policies is extremely significant. Had NSP done the things it was supposed to, at minimum, the line serving the Schachtner farm would have been further improved. More importantly, if NSP would have gone to the Schachtner farm in 1988, NSP would have installed an isolator pursuant to its policy at the time. (App. 355-356). The Schachtners would not have suffered for an additional nine years.

CONCLUSION

More, not less, should be required of public utilities to assure Wisconsin citizens that their utilities are providing useable, safe, and non-harmful electricity. Budget Bill Proposal § 3866 and the proposal to eliminate treble damages in cases of wilful, wanton or reckless failures to provide adequate service or facilities should not be part of the budget. These proposals are policy issues inappropriately contained within the budget. Moreover, the proposals are not based upon sound reasoning nor facts.

If you have any questions, please feel free to call Barry Hammarback, Mike Jacobson, or myself at 715-425-8180. I thank you for your attention to this matter.

Respectfully Submitted,



Daniel P. Murray, WI Atty Id #1022103

Attorney for Hammarback, Murray & Jacobson, S.C.
Attorneys committed to helping dairy farmers

INDEX TO APPENDIX

Supplemental Document:

D.S. Farms v. NSP (Unpublished Ct. App. 1995), another stray voltage case where NSP failed to meet minimum grounding requirements and where the jury determined NSP was negligent in the distribution of electricity.

Schachtner Farms v. NSP entries:

Document	Record Number	Appendix Number
Special Verdict dated 11/23/99	R.377:1-3	App.351-353
Exhibit 704, NSP's Rural Line Grounding Program	R.309	App.354
Exhibit 725, NSP's Neutral-To- Earth (NEV)Policy dated 12/14/87 (pages 5,6 and Exhibit 15)	R.320:7-8,30	App.355-357
Exhibit 495, NSP's Stray Voltage Analysis Report 8/2/93	R.199	App.358
Exhibit 496, NSP's Stray Voltage Analysis Report 12/27/95	R.200	App.359
Exhibit 497, NSP's Stray Voltage Analysis Report 12/29/95	R.201	App.360
Bodman Testimony	R.390:98-123, 132-134,254-255	App.361-391
Woychik Testimony	R.387:166-167, 177-180,201-202	App.392-399
Guenther Testimony	R.400:29-32	App.400-403
Reininger Testimony	R.387:259, 274-281	App.404-410

Wisconsin Case Law (Unpublished)

D.S. FARMS v. NORTHERN STATES POWER COMPANY, ___ Wis.2d ___ (Ct.App. 1995)
___ N.W.2d ___

D.S. FARMS, A PARTNERSHIP BY MELVIN M. DANZINGER, CAROLYN M. DANZINGER,
DAVID J. DANZINGER AND CYNTHIA L. DANZINGER,
Plaintiffs-Respondents-Cross-Appellants, v. NORTHERN STATES POWER COMPANY,
A DOMESTIC CORPORATION, Defendant-Appellant-Cross-Respondent.

Court of Appeals

Case No.: 94-1981

Opinion Released: August 29, 1995

Opinion Filed: August 29, 1995

This opinion will not be published. Rule 809.23(1)(b)5, Stats.

APPEAL and CROSS-APPEAL from a judgment of the circuit court for
Buffalo County: DANE F. MOREY, Judge. *Affirmed.*

Before Cane, P.J., LaRocque and Myse, JJ.

PER CURIAM.

D.S. Farms, a dairy farm ("the farm"), brought suit to recover for losses to its dairy herd and milk production claimed to have been caused by "stray voltage" from its electrical supplier, Northern States Power Company.^[fn1] Following the week long jury trial, the jury found NSP causally negligent in the distribution of electricity and the farm not contributorily negligent. It awarded the farm \$1,450,225 in damages. NSP appeals, arguing that (1) it is entitled to judgment notwithstanding the verdict; (2) insufficient evidence supports the verdict; (3) the jury instructions misstated the law and the verdict was ambiguous; (4) NSP is entitled to a new trial due to trial court error; and (5) the trial court erroneously awarded costs for photocopying under § 814.04(2), Stats.

The farm cross-appeals, arguing that the trial court erroneously denied treble damages pursuant to § 196.64, Stats. (1990).^[fn2] We reject both NSP's and the farm's challenges and affirm the judgment.

FACTS

Consistent with our standard of review, upon a challenge to the sufficiency of the evidence, we set forth those facts of record supporting the verdict. See *Fehring v. Republic Ins. Co.*, 118 Wis.2d 299, 305-06, 347 N.W.2d 595, 598 (1984). After the milking parlor was installed in 1979, the farm experienced production concerns. The cows exhibited nervousness in the parlor, mastitis, rougher looking coats and inability of young stock to properly mature. Attempts to improve milk production included working with a veterinarian, a nutritionist and milking equipment personnel, but met with no success. In 1985, the farm requested NSP to test for stray voltage. NSP performed tests and advised that there was no stray voltage problem. The farm also had an electrician check on farm wiring, but he did not uncover any problems.

In 1986, the farm purchased a volt meter. Jeff Danzinger, one of the farm's partners, discovered a correlation between the voltage readings and the cows' behavior. On nights that he received readings of over one quarter volt, he had problems.

The farm arranged for additional testing and found voltage levels exceeding one-half volt. As a result of the tests, the farm installed an electronic grounding device in 1987. After installation, voltages were reduced to zero. Within a month or two, milk production increased. The cows appeared much calmer, and their health started to improve. Gerald Bodman, professor in the department of biological systems engineering at the University of Nebraska, testified that stray voltage can cause the following symptoms: restlessness, decreased milk production, breeding problems, increased mastitis and cows lapping at, rather than sipping, water. He testified that although the farm's stray voltage problems were solved by 1988, it was reasonable for it to take until early 1994 for the herd to fully recover from the effects.

The herd's veterinarian, Dr. John Bengfort, testified that the farm's herd management was above average. He testified that the cows exhibited symptoms consistent with stray voltage. He testified that once stray voltage is removed, the cows will drink more water and eat more feed and that herd health will improve, resulting in increased production.

The farm called David Winter as their expert witness. His qualifications are unchallenged. Winter testified that he participated and worked on the patent for the electronic grounding system (EGS). A computer device called the Waverider was created to make accurate voltage measurements. Winter testified that based on voltages measured by the Waverider on February 26, 1987, voltages were at a level that was problematic for the herd. Winter testified that the source of the problematic voltage levels was NSP's primary neutral system.

Winter testified that NSP's power system was not adequate to meet the demands of the farm for electricity. He testified that the primary neutral system was not of low enough resistance to prevent voltage spikes from being generated by the power demands of the farm. He further stated that the voltage was adequate to keep things running on the farm, but not adequate to keep the voltage from sagging on the 240 volt system.

Based on his computations, Winter concluded that the average cow on the farm was exposed to one milliamperere with spikes up to 2.6, 90% of the herd would be exposed to .8 milliamperes all night and up to two milliamperes during milking, and 10% of the cows were exposed to 3.6 milliamperes of current flow. He testified that inadequate grounding in the area of the farm was a substantial factor causing the harmful voltage to access the cows.

The trial court ruled that as a matter of law NSP was not negligent with respect to testing, inspection or maintenance of the lines. It also ruled that the interconnection at the Cream/Alma substation was not a factor. Nonetheless, it permitted the matter to be submitted to the jury on the issue of negligence, concluding that the experts' testimony was in dispute as to the issue of grounding. The court also ruled that it was disputed whether voltage fluctuations were a contributing factor to the harm. [fn3]

The farm sought damages for losses from 1979 to 1987 due to stray voltage. The matter was submitted to the jury on the issue of common law negligence, causation and damages. The verdict determined that NSP was negligent in the distribution of electricity, causing harmful levels of stray voltage to contact the farm's dairy herd. The jury returned a verdict in favor of the farm and NSP appeals.

JUDGMENT NOTWITHSTANDING THE VERDICT

NSP argues that it is entitled to judgment notwithstanding the verdict, § 805.14(5)(b), Stats., due to (1) the absence of any legal duty; (2) the presence of an intervening force and

absence of any legal duty; (2) the presence of an intervening force and superseding cause; (3) the applicability of laches and estoppel; and (4) the court's admission of speculative expert testimony.

"A motion for judgment notwithstanding the verdict admits for the purpose of the motion that the findings of the verdict are true, but asserts that judgment should be granted the moving party on grounds other than those decided by the jury." *Kolpin v. Pioneer Power & Light Co.*, 162 Wis.2d 1, 29, 469 N.W.2d 595, 606 (1991). For reasons that follow, we conclude that the trial court properly denied NSP's motion for judgment notwithstanding the verdict.

1. Legal Duty

Negligence requires a duty of care on the part of the defendant, a breach of the duty and an injury caused by the breach. *Johnson v. Seipel*, 152 Wis.2d 636, 643, 449 N.W.2d 66, 68 (Ct.App. 1989). A party may be negligent under common law even if it complies with all applicable statutory and code requirements. *Beacon Bowl, Inc. v. WEPCO*, 176 Wis.2d 740, 769-70, 501 N.W.2d 788, 799-800 (1993). Whether undisputed facts give rise to a duty of ordinary care is a question of law that we review de novo. *Johnson v. Misericordia Comm. Hosp.*, 99 Wis.2d 708, 723, 301 N.W.2d 156, 164 (1981).^[fn4] Although the facts giving rise to the breach of the duty were hotly contested, the facts giving rise to existence of a duty of care were not. It is undisputed that NSP was the provider of electrical power to the farm. Brian Guenther, "NEV [neutral-to-earth] supervisor" for NSP, agreed that NSP had the responsibility to provide electricity without excessive amounts of current. He also agreed that NSP's grounding on its line and the balance of the neutrals is critical to keep the farm voltages down. Consequently, we conclude that NSP had a duty of ordinary care to provide electricity without harmful effects of stray voltage.

NSP argues that it has no legal duty of ordinary care because the farm failed to provide notice of stray voltage conditions. We conclude that notice requirements do not apply to the facts of this case.

NSP relies on *Snyder v. Oakdale Co-Op. Elec. Ass'n*, 269 Wis. 531, 69 N.W.2d 563 (1955), which holds that a company furnishing electric power for use in a private wiring system is not liable for injuries sustained by reason of a defect in the private system "unless it supplies current actually knowing of these conditions and the current is the cause of the injuries sued for, in which case it is the energizing of the line with knowledge of the conditions and not the conditions themselves which forms the basis of liability." *Id.* at 533, 69 N.W.2d at 564 (quoting *Oesterreich v. Claas*, 237 Wis. 343, 349, 295 N.W. 766, 768 (1941)). Here there was evidence to support the finding that the stray voltage emanated from NSP's own primary neutral system. Consequently, the Snyder notice requirements do not apply.

2. Intervening Force and Superseding Cause

Next, NSP argues that the farm's failure to provide notice of stray voltage conditions is a superseding cause of its damages. NSP argues that it was provided only one opportunity to analyze the stray voltage problem; that its tests showed no problem and that the farm's "failure to provide NSP accurate information and opportunities both before and after 1985 dictate that any negligence of NSP is too remote from the injury or damages to impose liability" for its negligence. We disagree.

"One policy ground for relieving a negligent tortfeasor from liability for conduct which has been a substantial factor in producing injury is the intervening and superseding cause doctrine." *Morgan v. Pennsylvania Gen'l Ins. Co.*, 87 Wis.2d 723, 738, 275 N.W.2d 660, 667 (1979). "A superseding cause is an act by a third party, while the plaintiff's conduct is considered under the umbrella of contributory negligence." *Id.* at 736-37 n.1, 275 N.W.2d at 667 n.1. Here, NSP asserts that the plaintiff's own omissions, not those of a third party, relieve it

of liability. We conclude that contributory negligence, not superseding cause, is the applicable doctrine and therefore a superseding cause analysis does not apply.

NSP also argues that the farm's failure to provide notice of stray voltage conditions is an intervening force. "An intervening force is one which actively operates in producing harm" Restatement (Second) of Torts § 441(1) (1965). However, NSP does not argue that the farm actively produced the harm, but rather failed to give it notice of the harm. Because the basis of NSP's argument rests with the farm's omissions, it raises the issue of contributory negligence, not issues of intervening force. Consequently, the doctrine of intervening force does not apply.

3. Laches

Next, NSP argues that the farm's complaint should be dismissed under the doctrine of laches. NSP argues that because the farm failed to provide timely and accurate notice to NSP that there was a problem that needed to be addressed, the defense of laches applies. We disagree.

To successfully assert a defense of laches, NSP must establish (1) an unreasonable delay; (2) lack of knowledge that the farm would assert its claim; and (3) prejudice. *Schneider Fuel & Supply Co. v. West Allis State Bank*, 70 Wis.2d 1041, 1053, 236 N.W.2d 266, 272 (1975). The trial court denied the defense of laches because it concluded that any delay on the part of the plaintiff farm was due to NSP's representation after it performed tests in 1985 that there was not any problem with stray voltage. Thus, the trial court concluded that the farm's delay, if any, was reasonable. Based upon the facts as found by the trial court, we agree. Further, NSP fails to assert any facts to support the element of prejudice. Therefore, we cannot dismiss the farm's claims on the basis of laches. [fn5]

4. Speculative Expert Testimony

Next, NSP argues that it is entitled to judgment notwithstanding the verdict because the verdict is based upon the farm's expert witnesses' speculation and conjecture. NSP claims the farm's expert witnesses' testimony is unreliable because (a) the engineer, David Winter, based his analysis on EGS tests made without a shunt resistor or measurements from the primary neutral; (b) economist Michael Behr based his opinion on data obtained after the installation of the EGS device, not on history prior to the time of injury; and (c) agricultural engineer Gerald Bodman based his opinion on the Cream/Alma substation interconnect as a cause of damages.

NSP argues that the trial court must ensure that expert testimony is both relevant and reliable. Relying on *Daubert v. Merrell Dow Pharms.*, 113 S.Ct. 2786, 2795 (1993), and a concurring footnote in *State v. Blair*, 164 Wis.2d 64, 78-81 n.9, 473 N.W.2d 566, 572-73 n.9 (Ct.App. 1991), NSP contends that the trial court should assess the reliability of the experts' underlying data. NSP contends that the trial court must make preliminary assessments of an expert's methodology and that failure to do so is reversible error. *Frymire-Brinati v. KPMG Peat Marwick*, 2 F.3d 183, 186-87 (7th Cir. 1993). We reject NSP's argument. [fn6]

First, to the extent NSP challenges the admission of testimony without the trial court assessing its reliability, the argument is not a proper basis for judgment notwithstanding the verdict. The admissibility of evidence is not challenged by this motion. *Kolpin*, 162 Wis.2d at 29, 469 N.W.2d at 606.

Second, *State v. Peters*, 192 Wis.2d 674, 534 N.W.2d 867 (Ct.App. 1995), rejected evidentiary challenges to reliability. "[T]he rule remains in Wisconsin that the admissibility of scientific evidence is not conditioned upon its reliability." *Id.* at 687, 534 N.W.2d at 872. Scientific evidence is admissible if (1) it is relevant; (2) the witness is qualified as an expert; and (3) the evidence will assist the trier of fact

qualified as an expert; and (3) the evidence will assist the trier of fact in determining an issue of fact. *Id.* at 687-88, 534 N.W.2d at 872; *State v. Walstad*, 119 Wis.2d 483, 516, 351 N.W.2d 469, 486 (1984). "Once the relevancy of the evidence is established and the witness is qualified as an expert, the reliability of the evidence is a weight and credibility issue for the fact finder and any reliability challenges must be made through cross-examination or by other means of impeachment." *Peters*, 192 Wis.2d at 690, 534 N.W.2d at 873.

The trial court, in its gatekeeping role, may reject relevant evidence for a variety of reasons, including if (1) it is superfluous; (2) it is a waste of time; (3) its probative value is outweighed by prejudicial effect; (4) the jury is able to draw its own conclusions without it; (5) it is inherently improbable or (6) the area is not suitable for expert testimony. *Id.* at 689, 534 N.W.2d at 872.

NSP argues that experts did not "compare the data at hand with known scientific principles," but the record discloses otherwise. *Behr*, *Winter* and *Bodman* all testified that they reviewed the available data from the farm in order to reach their conclusions. "An expert witness may state his relevant inferences from matters perceived by him or from evidence introduced at the trial and seen or heard by him or from his special knowledge, skill, experience or training . . ." *Kolpin*, 162 Wis.2d at 38, 469 N.W.2d at 610 (quoting *Rabata v. Dohner*, 45 Wis.2d 111, 133, 172 N.W.2d 409, 420 (1969)). Reliability of expert testimony is to be attacked on cross-examination. *Peters*, 192 Wis.2d at 690, 534 N.W.2d at 873. NSP has not demonstrated that the experts' testimony is incredible as a matter of law. See *Chapman v. State*, 69 Wis.2d 581, 583, 230 N.W.2d 824, 825 (1975) (Incredible as a matter of law means inherently incredible, such as in conflict with the uniform course of nature or with fully established or conceded facts.). NSP's argument fails to persuade us that as a matter of law the farm's experts' opinions rest purely on speculation and conjecture.

SUFFICIENCY OF EVIDENCE

The standard of review for sufficiency of evidence requires a reviewing court to examine the record for any credible evidence which under any rational view fairly admits of an inference that will support the jury's finding.

Peissig v. Wisconsin Gas Co., 155 Wis.2d 686, 702-03, 456 N.W.2d 348, 355 (1990). For the reasons that follow, we conclude that sufficient credible evidence supports the verdict.

1. Negligence

NSP argues that no credible evidence supports the jury's finding of negligence. It cites evidence to support a finding that it was not negligent, such as the trial court's finding that it was not negligent with respect to inspection, testing and maintenance of its line. It argues that its grounding exceeded code and that the "resistance of the majority of ground rods or their combination on the entire distribution line were relatively good."

NSP's argument misconstrues the function of appellate review. [fn7] We must resolve all conflicts in the testimony in the light most favorable to the verdict.

The credibility of the witnesses and the weight afforded their individual testimony is left to the province of the jury. Where more than one reasonable inference may be drawn from the evidence adduced at trial, this court must accept the inference that was drawn by the jury.

Fehring, 118 Wis.2d at 305-06, 347 N.W.2d at 598.

The jury heard days of technical testimony by expert witnesses whose qualifications are unchallenged. The record demonstrates that

whose qualifications are unchallenged. The record demonstrates that numerous conflicting inferences could be drawn from the evidence. However, it is the jury's function, not that of the appellate court, to resolve conflicts. We review the record for credible evidence to sustain the jury's verdict, not to search for evidence to sustain a verdict the jury could have reached, but did not. *Id.* at 306, 347 N.W.2d at 598.

The adequacy of the grounding and the level of resistance in the distribution line were issues of fact at trial. The jury could have believed Winter's testimony that resistance on the line was too high, causing harmful voltage to access the cows. Winter testified: "The primary neutral resistance was too high allowing voltage to be developed on the primary neutral as a result of the normal requirements for current to supply the <Danzinger>'s 240 volt loads." He testified that inadequate neutral conductor size, poor neutral connections or inadequate amount of grounding along the neutral were reasons for high resistance. Winter further criticized the lack of grounding within a quarter mile of the farm. "[H]ad they put those grounds in, there could have been a substantial reduction of voltage on the farm just from that simple action." He also testified that voltage changes caused frequent voltage spikes harmful to the cows. The testimony was sufficient to permit the jury to find that NSP breached its duty to distribute electricity without harmful stray voltage.

2. Cause

NSP also argues that the jury's finding of causation is based upon speculative evidence in direct conflict with physical evidence. It contends that physical evidence controls when in clear conflict with testimony, *see* *Chart v. GMC*, 80 Wis.2d 91, 111, 258 N.W.2d 680, 688 (1977), arguing that "NSP's 1987 parlor testing with the shunt resistor controls over Winters' calculations based on the 1987 EGS tests measured without the shunt resistor." It contends that Winters' calculations must be rejected because they lack sufficient foundation. We disagree.

First, the jury heard testimony that the farm's experts had reviewed NSP's tests and that its test results did not rule out stray voltage problems. Second, NSP's argument essentially asks this court to assess the reliability of the opposing experts' testimonies, which is not a trial or appellate court function. *See Peters*, 192 Wis.2d at 690, 534 N.W.2d at 873. NSP's argument is not based upon "physical evidence," but rather on interpretations of physical evidence. The farm's experts disagreed with NSP's experts' interpretations of the various tests performed. Because the farm's experts' testimony supported the jury's finding of causation, we reject NSP's argument.

3. Damages

Next, NSP argues that (a) the evidence is insufficient to support the jury's finding of damages; (b) the verdict confuses capital loss calculations with those of fair market value, for which there was no evidence; (c) evidence of the farm's "normal trend" was computed contrary to the requirements of Wisconsin law; (d) the economist failed to take into account feed savings analysis and speculated as to milk production loss and (e) damages are excessive. We disagree.

The damages question on the special verdict asked two questions:

What sum of money will fairly and reasonably compensate the Plaintiffs for:

(a) Lost milk production due to harmful levels of stray voltage?

ANSWER: \$ 1161572

(b) Loss of fair market value to their dairy herd due to harmful levels of stray voltage?

ANSWER: \$ 283663

Credible evidence supported the jury's findings. Bodman testified that the effects of stray voltage include lowered milk production and breeding problems. Bodman testified that the period of time from 1987 to early 1994 was a reasonable time frame for the herd to recover from the effects of stray voltage. Michael Behr, a forensic economist, was qualified as the farm's expert to testify with respect to damages. He testified, to the requisite reasonable degree of certainty, that the amount of damages the farm sustained as a result of stray voltage between 1979 to 1993 totaled \$1,726,586. He broke down the total loss into two categories, the cost to replace cattle and lowered milk production. He testified that the total amount of milk loss the farm sustained between 1979 and 1993 was \$1,348,414 and the total amount of capital loss during the same time frame due to stray voltage was \$373,182.

Behr testified to the reasons for his opinions. He testified that a dairy farm typically produces three commodities: (1) milk, (2) beef and (3) young stock. He testified that "capital loss" was the cost of purchasing cattle. He opined that but for the harmful effects of stray voltage, the herd would have produced enough young to replace damaged cattle. In order to mitigate lost milk production due to damaged cattle, the farm was required to sell cattle and purchase replacements, and the cost of purchasing replacements was taken into account.

Behr further testified as to how he arrived at lost milk production calculations. Based upon farm records, farm finances, the number of cows, his own experience in agricultural economics, as well as publications concerning Wisconsin dairy farming, he calculated what he called a "normal trend line," that is, the general level of production an economist would expect to see under a certain set of conditions, taking into account variations that would occur over time.

For example, in 1979, the 120.70 cows in the herd each produced 12,043 pounds of milk. Behr projected that that normal production would have been 14,686 pounds. At the price of \$.1207960, Behr calculated that actual sales were \$175,589 instead of \$214,123. Consequently, Behr arrived at a \$38,534 milk loss for 1979. Behr made a similar analysis for each year through 1993. In 1985 for example, the herd consisted of 256.33 cows. Production slipped to 11,466 pounds. Milk prices increased to \$.1249593. The milk loss for 1985 was calculated to be \$201,367. Behr testified that the farm did not achieve the normal trend until 1993 and was expected to exceed the normal trend.

A party who suffers damage to his business through a wrongful act of another is entitled to compensation for the loss. "[A]s a general rule in tort actions there may be recovery for loss of profits if the plaintiff can show with reasonable certainty the anticipation of profit." *Krueger v. Steffen*, 30 Wis.2d 445, 450, 141 N.W.2d 200, 202 (1966). The proper measure for damages for lost animals is the replacement cost, reflected in market value at the time of the loss. *Rosche v. Wayne Feed Div., Continental Grain Co.*, 152 Wis.2d 78, 82, 447 N.W.2d 94, 96 (Ct. App. 1989). "[E]vidence of the value of full-term calves less the cost of care and feeding to the conclusion of the term is admissible and relevant under a broad evidence rule" when calves are marketed before the completion of the term. *Strauss Bros. Packing Co. v. American Ins. Co.*, 98 Wis.2d 706, 709, 298 N.W.2d 108, 110 (Ct.App. 1980).

NSP argues that Behr failed to account for a variety of factors, such as the general level of management, the feeding, including feed cost savings, the effects of Johne's disease and tornado damage.^[fn8] The jury could infer, based upon Bodman's and Bengfort's testimony, that the herd was more susceptible to disease, such as Johne's disease, as a result of stray voltage. Also, Behr testified that his calculations took into account these factors. Whether his testimony is to be believed is a credibility issue left to the jury.

NSP also complains that there is no evidence "to support the jury's

NSP also complains that there is no evidence "to support the jury's verdict on post-injury loss of fair market value." The record, however, supports the inference that the cow's general health, including breeding, is affected by stray voltage. Bodman testified that the period from 1987 to early 1994 would be a reasonable time for the herd to recover from stray voltage effects. Behr testified to the requisite degree of reasonable certainty to the farm's anticipation of earnings but for the harmful effects of stray voltage, as well as the cost of replacing damaged animals. Behr report indicates that \$373,182 represented capital loss from 1979 to 1993. The jury awarded \$283,663. Credible evidence supports the verdict.

Next, NSP contends that the farm's counsel unfairly confused the concept of capital loss calculation and fair market value. The record shows that at closing arguments, the farm's counsel stated "Doctor Behr's report has in it a total damage amount including some capital losses or fair market value losses for cows, and I'll just lump 'em together, but his report will be in evidence and you can take a look at it."

NSP fails to demonstrate any duplication of damages or any prejudice with respect to using the terms interchangeably. Behr testified that there were two categories of loss: lost milk production and loss associated with purchase of cattle. Behr explained capital loss as follows:

[A] normally operating dairy herd of the size and stability of the Danzingers will normally produce internally, or by itself, enough animals to replace the animals that are culled, and indeed to produce somewhat more animals than that which can be sold as dairy heifers or used for expansion of the herd. . . . What we are talking about here is replacement of damaged cattle

At closing argument, the farm's counsel stated that he used the term "capital loss" interchangeably with loss to fair market value. Despite whether the two terms should be used interchangeably, the record demonstrates credible evidence to support the verdict's damage finding showing the loss of value to the herd due to the cost of replacing cattle. Because NSP fails to demonstrate how it was prejudiced by the terminology, we do not reverse on appeal.

NSP argues that the calculation of damages was contrary to Wisconsin law because Behr's normal trend was "merely his own subjective opinion, not based upon any statistical analysis applied to the relevant facts of D.S. Farms." The record fails to support this argument. Behr testified that he reviewed the actual production on the farm, as evidenced by milk check stubs and producer milk weights, the level of management, the cost and expenses of feed, the data available since the installation of EGS in 1987 and information concerning dairy production in the state in order to arrive at his opinion. Behr testified:

I do look at . . . how they do their rations, how they do their breeding, what's their degree of knowledge with respect to overall management of the herd generally? And whether or not the kind of things that in this case the Danzingers are doing are consistent with other farms . . . and do those similar practices result in my experience in production that's 10 percent below the state average or 10 percent above it.

Behr testified that the herd is "[c]ertainly I would say in the 15 top percent and possibly in the top 10 percent but not in the top five percent." He testified that he evaluated the <Danzinger> farm and compared his findings to other Wisconsin farms. An expert witness may state his opinions based upon evidence perceived by him, introduced at trial or from his special knowledge, skill, experience or training. Kolpin, 162 Wis.2d at 38, 469 N.W.2d at 610. NSP's attack on Behr's credibility is an issue for cross-examination, not appeal. See Peters, 192 Wis.2d at 690, 534 N.W.2d at 873; Fehring, 118 Wis.2d at 305-06, 347 N.W.2d at 598.

NSP also argues that because Bodman offered the *only* opinion that lowered milk production was the result of stray voltage and Bodman's opinion was based upon invalid assumptions, the farm failed to meet the burden of establishing its damages to requisite certainty. The record fails to support NSP's argument. Bodman's testimony concerning the effects of stray voltage was based on many factors, including data perceived by him, data introduced at trial, as well as his specialized knowledge, experience and training. The validity of his opinion was a matter for cross-examination. Also, testimony of Behr, Winter and Bengfort support the jury's findings.

We further conclude that the trial court properly determined that damages are not excessive in view of Behr's report that would have supported a damage figure substantially higher than the jury award. It is evident that the jury considered NSP's vigorous cross-examination, which succeeded in convincing the jury to award significantly less than what Behr reported.

JURY INSTRUCTIONS AND SPECIAL VERDICT

NSP argues that the jury was erroneously instructed with respect to causation.^[fn9] NSP argues that "as instructed, the 'yes' answer to the cause question was a given because NSP will always be contributing some stray voltage absent mitigation devices." It argues that because some stray voltage is always present, see *Kolpin*, 162 Wis.2d at 499-500, 469 N.W.2d at 598, "[t]he issue which the jury should have determined was whether NSP's contribution to the cow contact voltages, in and of itself, caused a harmful level."

The trial court correctly instructed the jury. The trial court has broad discretion in instructing the jury. *McKnight v. GMC*, 143 Wis.2d 67, 69, 420 N.W.2d 370, 371 (Ct.App. 1987). Under Wisconsin's "substantial factor" test, it is sufficient that the farm demonstrate that the utility was negligent and that its negligence was a substantial factor in producing the harm.

[T]here may be several substantial factors contributing to the same result. The contribution of these factors under our comparative negligence doctrine are all considered and determined in terms of percentages of total cause.

Sampson v. Laskin, 66 Wis.2d 318, 325-26, 224 N.W.2d 594, 598 (1975) (footnote omitted). Here, the jury was correctly instructed that in order to find cause, they must find that negligence was a substantial factor in producing the damages. Also, the verdict inquired whether the negligence caused harmful levels of stray voltage to contact the dairy herd. Consequently, the instructions were proper.

NSP argues that the verdict was ambiguous.^[fn10] NSP failed to preserve its objection to the form of the verdict. At the instruction and verdict conference, NSP stated that in light of the court's previous rulings and without waiving previous objections, "we have no objection to the form" of the verdict.

Counsel may object to the proposed instructions or verdict on the grounds of incompleteness or other error, *stating the grounds for objection with particularity on the record*. Failure to object at conference constitutes a waiver of any error in the proposed instructions or verdict.

Section 805.13(3), Stats. (Emphasis added.) Given the multi-volume transcript in this record, we conclude that NSP's failure to cite to the record its specific objection to the verdict waives error. Cf. *Tam v. Luk*, 154 Wis.2d 282, 291 n.5, 453 N.W.2d 158, 162 n.5 (Ct.App. 1990).

NEW TRIAL

Next, NSP argues that it is entitled to a new trial because the trial court erroneously (1) misinterpreted the electrical code and (2) misapplied the statute of limitations.[fn11] We disagree.

NSP argues that the trial court erroneously concluded that Wis. Admin. Code § PSC requires nine grounds per circuit mile.[fn12] NSP contends the correct number is four. The trial court observed that even experts did not agree as to the appropriate application of the code. The trial court determined that "rural electrical distribution systems utilizing multiple ground systems which are grounded to on-farm water systems must have nine grounds per mile." [fn13] The court stated: "[I]t doesn't mean you can't prove up that four is all you need because you had all the additional grounds you needed, but based upon the norms in a rural area, I think you have got to have the nine. Because we don't know the quality of the underground piping . . . on a farm"

The code sections requiring nine grounds states:

The neutral, which shall be of sufficient size and ampacity for the duty involved, shall be connected to a made or existing electrode at each transformer location and at a sufficient number of additional points with made or existing electrodes to total not less than nine grounds in each mile . . . of line, including those grounds at transformer locations but not including grounds at individual services.

Wis. Admin. Code § PSC at 114-96C.

NSP argues that the above section does not apply. Instead, it argues that the following applies:

The primary neutral conductor . . . may be interconnected solidly with the secondary neutrals and may come under the clearance requirements specified for 0 to 750 volts in Order 1232 provided (a) the customer service entrances and supply end are grounded in such a way that the requirements of 1038 are met and (b) or (c) below are complied with.

(b) The neutral is connected to an extended metallic underground piping system or artificial grounds complying with the resistance requirements of Order 1038 at each transformer location and at a sufficient number of additional points to total four ground connections per mile.

WSEC Order 1031.B.5 (5th ed. 1960).

NSP also relies on Order 1038, which provides:

A. Limits The combined resistances if the grounding wire and the connection with the ground shall not exceed 3 ohms for water-pipe connections nor 25 ohms for artificial (buried or driven) grounds. Where it is impracticable to obtain, with one electrode, artificial ground resistance as low as 25 ohms, this requirement shall be waived, and two electrodes at least 6 feet apart, shall be provided.

B. Checking . . . Ground connections on distribution circuits should, when installed, be tested for resistance unless multiple grounding is used.

We conclude that NSP fails to demonstrate the trial court misapplied the code. Although the interpretation of the code is generally a question of law, Wausau Hosps., Inc. v. DHSS, 95 Wis.2d 601, 605, 291 N.W.2d 602, 604 (Ct.App. 1980), the issue here is not one of interpretation but rather of application. Based upon evidence of record, the trial court concluded that nine grounds applied in rural areas where no common water systems and driven grounds not meeting Order 1038 were used. NSP fails to demonstrate that based upon the record before the court, the

NSP fails to demonstrate that based upon the record before the court, the trial court erroneously found that the farm was a rural area without a common water system and with driven grounds not meeting Order 1038.

NSP contends that it was precluded by the court's ruling to establish that its construction practices conformed to Order 1038A. We disagree. The trial court specifically stated that its ruling did not mean that NSP could not prove that all it needed was four grounds. NSP cites to the pretrial deposition of Duttee Holmes, Jr. This reference is insufficient to conclude that the court erroneously concluded on the record before it that Order 1038 did not govern.

Next, NSP argues that the trial court misapplied the statute of limitations. It argues that a jury question is presented whether the farm exercised reasonable diligence in discovering NSP's possible causal relationship to the stray voltage. We disagree.

A tort claim accrues on the date the injury is discovered or with reasonable diligence should have been discovered. Hansen v. A.H. Robins, Inc., 113 Wis.2d 550, 560, 335 N.W.2d 578, 583 (1983). "The issue of reasonable diligence is ordinarily one of fact." Spitler v. Dean, 148 Wis.2d 630, 638, 436 N.W.2d 308, 311 (1989).

Here, the trial court granted the farm's motion for a directed verdict on the issue of statute of limitations. It concluded as a matter of law that the statute of limitations started to run in 1987. It stated:

Kolpin makes it very clear the standard to use in this type of case, particularly where it is very difficult in this area to determine, as admitted by both sides, to determine what the causes are of the problems that are being experienced. And it is [the] opinion of the Court that the statute of limitations started to run when the EGS was installed and a neutral to earth voltage was I would call separated from the farm.

Cases should be taken from the jury and verdict directed only if the evidence gives rise to no dispute as to material issues or when evidence is so unbiased that impartial minds come to but one conclusion. Holloway v. K-Mart Corp., 113 Wis.2d 143, 150, 334 N.W.2d 570, 574 (Ct. App. 1983). Here, it is undisputed that the relationship between stray voltage and the injuries it causes is difficult to determine. It is also undisputed that "[t]he Danzingers were checking into stray voltage problems as early as 1983 and 1984" It is also undisputed that the Danzingers did not observe a resolution of their stray voltage problems until they installed the EGS system in 1987. There is no evidence that the Danzingers delayed the installation of the EGS system while knowing that they had a stray voltage problem. Consequently, the trial court correctly determined that the undisputed facts permitted the only reasonable inference: that the Danzingers knew, or with reasonable diligence should have known that they experienced stray voltage problems in 1987 with the installation of EGS. Cf. Kolpin, 162 Wis.2d at 27, 469 N.W.2d at 605 ("We hold that the Kolpin's case against Pioneer did not accrue until . . . they installed the electronic grounding device.").

PHOTOCOPYING COSTS

In a four-sentence argument, NSP argues that the trial court erroneously assessed costs of photocopying. NSP does not cite to the record or indicate what the photocopies were used for. It points out that in two cases contrary results were obtained, see Zintek v. Perchik, 163 Wis.2d 439, 475, 471 N.W.2d 522, 535 (Ct.App. 1991); Ramsey v. Ellis, 163 Wis.2d 378, 385-386, 471 N.W.2d 289, 292 (Ct.App. 1991), but does not explain why Ramsey should apply here. We do not develop the argument and decline to address undeveloped arguments on appeal. State v. Gulrud, 140 Wis.2d 721, 730, 412 N.W.2d 139, 142 (Ct.App. 1987).

CROSS-APPEAL

The farm argues that the trial court erroneously denied it treble

The farm argues that the trial court erroneously denied it treble damages under § 196.64, Stats. We disagree. Section 196.64 now provides for treble damages under the following circumstances:

Public utilities, liability for treble damages. (1) If a director, officer, employe or agent of a public utility, in the course of the discharge of his or her duties, wilfully, wantonly or recklessly does, causes or permits to be done any matter, act or thing prohibited or declared to be unlawful under this chapter or ch. 197, or wilfully, wantonly or recklessly fails to do any act, matter or thing required to be done under this chapter, the public utility shall be liable to the person injured thereby in treble the amount of damages sustained in consequence of the violation. No recovery as in this section provided shall affect a recovery by the state of the penalty prescribed for such violation.

(2) The burden of proof in an action under sub. (1) rests with the person injured to prove the case by clear and convincing evidence.

The current version of this statute is a response to Peissig v. Wisconsin Gas. Co., 155 Wis.2d 686, 456 N.W.2d 348 (1990), which held that an award of treble damages does not require proof of wilful, wanton or reckless behavior. Beacon Bowl, 176 Wis.2d at 774, 501 N.W.2d at 801. Peissig reached this conclusion because gross negligence was abolished in 1962 with Bielski v. Schulze, 16 Wis.2d 1, 114 N.W.2d 105 (1962). Because gross negligence was necessary to find treble damages under former § 196.64, Stats., and gross negligence was abolished, then what constituted gross negligence was no longer held to be necessary to support an award of statutory treble damages. Peissig, 155 Wis.2d at 694, 456 N.W.2d at 351.

Peissig held that "[i]t is not mere negligence that results in the imposition of liability under sec. 196.64. Rather only actions or omissions amounting to negligence that constitute a failure to comply with the provisions of chs. 196 or 197, warrant the imposition of treble damages." Id. at 700, 456 N.W.2d at 354. The farm contends that it is entitled to treble damages because a finding of wilful, wanton or reckless conduct is not required and the record here shows failure to comply with provisions of ch. 196, Stats. We disagree.

"Before Peissig, a finding of [wilful, wanton, or reckless] conduct was necessary." Beacon Bowl, 176 Wis.2d at 774, 501 N.W.2d at 801. Peissig was decided in 1990. Because there is no dispute that EGS was installed in 1987 in response to a suspected stray voltage problem, we conclude that the pre-Peissig standard applies. Because a finding of willful, wanton or reckless conduct was required before 1990, and it is undisputed that there is no evidence to support such a finding, the imposition of treble damages under § 196.64, Stats., is not warranted.

The farm argues that we should apply Peissig standards to pre-1990 conduct because Peissig did not change the law but only clarified the law. We are bound by supreme court precedent. State v. Lossman, 118 Wis.2d 526, 533, 348 N.W.2d 159, 163 (1984). Beacon Bowl expressly states that before Peissig, a finding of wilful, wanton or reckless conduct was required. Beacon Bowl, 176 Wis.2d at 774, 501 N.W.2d at 801. Consequently, we conclude that absent any showing of such conduct, § 196.64, Stats., treble damages are not warranted. [fn14]

By the Court. - Judgment affirmed. No costs on appeal.

[fn1] "Stray voltage" has been described as neutral to earth voltage, a phenomenon present in all active distribution systems, that can come from a variety of sources both on and off the farm. In unreasonably high amounts flowing along paths that conduct electricity, such as metal and water, it

becomes harmful. *Kolpin v. Pioneer Power & Light Co.*, 162 Wis.2d 1, 10, 469 N.W.2d 595, 598 (1991). The farm's expert witness, Gerald Bodman, testified that one milliamp of current has an adverse effect on the majority of cows and that one milliamp of current is the equivalent of .5 volts.

[fn2] Because we affirm the judgment, we need not address the farm's additional arguments on cross-appeal raising the issues of negligence per se, strict liability, nuisance and trespass. Cf. *Gross v. Hoffman*, 227 Wis. 296, 300, 277 N.W. 663, 665 (1938) (court need only address dispositive issues).

[fn3] However, the court ruled that there was no violation of Wis. Admin. Code §§ PSC 113.25 or PSC 113.26.

[fn4] "The duty of any person is the obligation of due care to refrain from any act which will cause foreseeable harm to others" although the nature of the harm, and the identity of the person or interest harmed is unknown at the time of the act. *Johnson v. Misericordia Comm. Hosp.*, 99 Wis.2d 708, 723, 301 N.W.2d 156, 164 (1981) (citation omitted).

[fn5] NSP also argues that equitable estoppel requires dismissal. It fails to identify in what part of the record it raised the defense of equitable estoppel. The portion of the trial transcript that it identifies merely discussed nuisance and laches. Consequently, we decline to address this argument. See *Keplin v. Hardware Mut. Cas. Co.*, 24 Wis.2d 319, 324, 129 N.W.2d 321, 324 (1964).

[fn6] Objections to Wisconsin's general relevancy test approach have been articulated in the past. See Craig A. Kubiak, Comments, *Scientific Evidence in Wisconsin: Using Reliability to Regulate Expert Testimony*, 74 Marq. L. Rev. 261 (1991); Daniel Blinka, *Scientific Evidence in Wisconsin after Daubert*, 66 Wis. Law. 10 (Nov. 1993).

[fn7] Without citation to legal authority, NSP argues: "The standard for changing an answer in the verdict is lesser than for granting judgment notwithstanding the verdict." NSP misstates the law. The standards are qualitatively, not quantitatively, different. See *Kolpin v. Pioneer Power & Light Co.*, 162 Wis.2d 1, 28-29, 469 N.W.2d 595, 606 (1991).

[fn8] Contrary to NSP's assertions, Behr testified that he took into account the tornado, the effects of John's disease and the cost of feed, as well as the Danzingers' farm finances and management. Behr's report broke down the losses for milk on a year-by-year basis. On cross, Behr was asked:

Q And you have calculated from a thousand pounds and so on the difference it would make per animal in the cost of doing the feed and so on to indicate what the difference would be relatively between production at say 14,000 and 20,000, correct?

A That is correct.

He further answered on cross that he had taken into account the tornado damage: "I have determined that my damage figure attributable to the stray voltage is consistent with whatever damage may have existed from the storm, and there certainly was some. . . . [M]y damage figures attributable to stray voltage acknowledge the fact that the John's existed"

[fn9] The jury was instructed:

The cause question. It's asked whether there was a causal connection between the negligence of any person or party and the damages. These questions do not ask about the cause, but rather, a cause. The reason for this is that there may be more than one cause of damages. The negligence of one person or one party may cause damages or the combined

person or one party may cause damages or the combined negligence of two or more persons or parties may cause it. Before you can find that a person's negligence was a cause of the damages, you must find that his or its negligence was a substantial factor in producing the damages.

[fn10] The verdict asked the following questions with respect to negligence and causation:

1. Was NSP, through its employees and agents, negligent in the distribution of electricity to the plaintiffs?
2. If you have answered Question 1, "yes", then answer this question:

Did that negligence cause harmful levels of neutral to earth (stray) voltage to contact plaintiffs' dairy herd?

3. If you answered Question 2, "yes", then answer this question:

Was that negligence a cause of damage to the plaintiffs' dairy operation?

The jury answered the three questions in the affirmative. The verdict then inquired as to the plaintiffs' negligence, to which the jury answered in the negative.

[fn11] NSP also argues that for a variety of reasons, including trial court error, (3) the jury's conclusions were contrary to the great weight and clear preponderance of the evidence and (4) damages are excessive. We have already addressed these issues and do not repeat the discussion here.

[fn12] Although the matter was submitted to the jury on the basis of common law negligence, and the jury was not instructed with respect to code requirements, NSP contends that it was prejudiced by the court's ruling. Winter testified that NSP's failure to have a minimum of nine grounds per mile on its distribution line was a contributor of the injurious voltages. He also testified that had there been more grounds according to the Wisconsin code, the voltage would have been less, and the current through the cows would have been less. The farm offered into the record the court's order that there should be nine grounds per circuit mile.

[fn13] The court gave deference to the PSC's interpretation as evidenced by a letter from one of its engineers to Charles Gustafson, manager of NSP, dated May 13, 1992.

[fn14] The parties devote much of their argument to whether the record discloses a violation of ch. 196, Stats. Because we apply the pre-Peissig standard to pre-1990 conduct, we do not address the issue.

STATE OF WISCONSIN

CIRCUIT COURT

ST. CROIX COUNTY

SCHACHTNER FARMS, a partnership,
by John A. Schachtner, and Terese M.
Schachtner, and Richard H. Schachtner,
and Elaine M. Schachtner,

Plaintiffs,

v.

SPECIAL VERDICT

Case No. 97 CV 118

NORTHERN STATES POWER COMPANY,
Defendant.

We, the jury, duly impaneled and sworn to try the issues in the above-entitled action,
hereby find the following as our Special Verdict:

1. Was Northern States Power Company, through its agents and/or employees, negligent?

ANSWER: yes
(Yes or No)

Instruction: Answer question 2 only if you answered "yes" to question 1.

2. Was such negligence a cause of damages to the Schachtners?

ANSWER: yes
(Yes or No)

Instruction: Answer question 3.

3. Did Northern States Power Company fail to provide reasonably adequate service and/or
facilities to the Schachtners in a wilful, wanton, or reckless manner?

ANSWER: yes
(Yes or No)

Instruction: Answer question 4 only if you answered "yes" to question 3.

4. Was such failure a cause of damages to the Schachtners?

ANSWER: yes
(Yes or No)