Testimony Before the Joint Energy and Environment Committee

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Good afternoon, Chairwoman McGinn and members of the Joint Energy and Environment Committee. I am Steve McNinch, CEO of Western Plains Energy LLC, which is an ethanol plant near Oakley, Kansas. The Western Plains plant began operating in 2004, as a 30 million gallon per year plant but expanded to its current capacity of 48 million gallons per year. I am also the Chairman of the Kansas Association of Ethanol Processors, which represents the ethanol plants and allied industries in Kansas.

Chairwoman McGinn has asked me to review the water usage by ethanol plants. My plant uses approximately 500 acre feet per year. It is common practice for a plant to buy water rights from an irrigator to have water to operate the plant. Once a plant purchases the water right, the Division of Water Resources within the Kansas Department of Agriculture, automatically reduced the water right by 40% because the law requires any water right that goes from agricultural use to either commercial or industrial be reduced by 40%. Thus from the initial stage there is a reduction in the amount of water we can use versus what the farmer would have been able to use.

Another way the ethanol plants help with the reduction of water consumption is by selling the wet distillers grain to a feedlot. The wet distillers grain contains enough water that the feedlot can reduce the amount of water given to the animals by at least 10%. Therefore, even though the water is initially used by the ethanol plant, this usage is overset by the reduction needed to be used by the feedlot.

Water at an ethanol plant is primarily used to cool the ethanol plants. The estimate is 2/3 of the total water use goes to cooling the plant and 1/3 goes to the ethanol process. This water that is used for cooling is recycled but some is lost to evaporation. However, the end result is that ethanol contains only 1% water. Therefore, almost all of the water used by an ethanol plant is being consumed and used in the state of Kansas.

You may wonder how the water usage of an ethanol plant compares to other water usage. Here are some interesting comparisons:

- To produce 50 million gallons of oil, it would take approximately 6700 acre feet of water
- The 500 acre feet used by my plant would only be enough water to grow 250 acres of corn.
- An average golf course uses 314 acre feet of water per year
- 30,000 head of dairy cattle consume approximately 1200 acre feet a year
- Kansans use approximately 4.6 million acre feet of water a year. Ethanol plants use only 6071 acre feet of this usage, or only .13% of the total water usage in the state.

We recognize that water is an important and finite resource. That is why the ethanol industry is working hard to ensure that through better and newer technology we can improve the water efficiency of the ethanol plants. Currently ethanol plants are running at lower cooking temperature and are eliminating direct steam injection as ways to reduce the amount of energy and water needed to cool the plant.

Ethanol plants in Kansas have generated local economic growth through their presence in those communities. A Nebraska study found that a 100 million gallon plant results in:

- $150m in capital construction
- $70 m to the economy during construction
- Expansion of the local economic base by $233 million each year
- 45 direct jobs plus 101 indirect jobs
- Raised grain prices by $.10 a bushel

- Tax revenues of $3.2m per year
- Western Plains employs 37 people and has an annual payroll of $2,500,000.

I appreciate the ability to present this information to the committee today. I hope I have given you an understanding of the water used by an ethanol plant in Kansas and the benefits that the small, rural communities receive from having one of these plants in their area. I would be happy to answer any questions you may have at the appropriate time.