MINUTES

JOINT COMMITTEE ON ENERGY AND ENVIRONMENTAL POLICY

Friday, September 9, 2011
Room 152-S—Statehouse

Members Present

Representative Carl Holmes, Chairperson
Senator Marci Francisco
Senator Ralph Ostmeyer
Senator Mike Petersen
Senator Mark Taddiken
Representative Mitch Holmes
Representative Forrest Knox
Representative Annie Kuether
Representative Tom Sloan
Representative Vince Wetta

Members Absent

Senator Carolyn McGinn, Vice-chairperson

Staff Present

Cindy Lash, Kansas Legislative Research Department
Heather O'Hara, Kansas Legislative Research Department
Matt Sterling, Office of the Revisor of Statutes
Tamara Lawrence, Office of the Revisor of Statutes
Renae Hansen, Committee Assistant

Others Attending

See attached list.

Chairman Holmes called the Committee to order and welcomed Committee members and guests to the meeting.

Water Availability

Tracy Streeter, Executive Director, Kansas Water Office (Attachment 1), spoke to the Committee, sharing a summary of issues that have been at the forefront for the State of Kansas concerning water issues since January 2011. Mr. Streeter first provided an update to the Committee on the agency's activities since January 2011. The agency continues to work on its Reservoir Roadmap publication, which outlines the actions necessary to insure adequate future water supply for areas currently or potentially served by federal, state, or municipal reservoirs. Mr. Streeter then

discussed the agency's collaboration in water resource planning and management with regional, state, and federal government organizations on common water resource issues.

Mr. Streeter informed the Committee that Kansas received a visit from the Assistant Secretary to the Army for Civil Works, who toured several sites in the state with the Governor and discussed water resources issues. After the visit, the agency received notice that remediation efforts at the Hartford Levee will be funded by the U.S. Army Corps of Engineers in the fall of 2011.

Mr. Streeter provided updates on reservoir bathymetric surveys that have been completed at 58 lakes by the Kansas Biological Survey and on streambank stabilization projects to reduce downstream sedimentation. Finally, Mr. Streeter provided follow-up information to the Committee regarding the potential of a state-owned dredging program by providing a summary of the Ohio Dredging Program.

An update on reservoir storage purchases was provided to the Committee, along with information about economic benefit districts for Kansas reservoirs. Mr. Streeter then completed his presentation by discussing the issue of drought around the state. He spoke to the emergency plans the state has in case of extreme water depletion.

Gary Harshberger, Chairman, Kansas Water Authority (Attachment 2), spoke to the Committee on the current drought condition that exists in Kansas, due to record high temperatures and the lack of rain. He spoke of the effects of the drought conditions, stating that crop yield reductions will affect the cattle industry, the Ogallala Aquifer declines are significant, and a loss of pasture and hay ground. Mr. Harshberger stated there will be a significant loss of wheat due to lack of water needed to germinate the seed. He informed the Committee about the Ogallala Aquifer Summit held in Colby, Kansas, which had over 400 people in attendance.

Dave Barfield, Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, presented a series of graphs to the Committee (Attachment 3) to explain the drought situation in Kansas. Additionally, he talked about options (Attachment 4) that are available to water users to help offset the drought conditions. The two resolutions the Division of Water Resources has derived to help deal with the drought are: five-year flex accounts and drought emergency term permit. Mr. Barfield spoke about the NOAA (National Oceanic and Atmospheric Administration) watch for La Niña for next year, which is a condition in the Pacific Ocean that has been causing the drought problem the state is experiencing. Mr. Barfield also presented a handout to the Committee (Attachment 5) explaining the distribution of 2011 drought emergency term permits, comparing the permits to the Kansas Geological Survey saturated thickness of moisture in the state.

Mr. Harshburger noted that producers need to plant crops which are adapted to water availability and not to the market. He commented that corn has been known recently as a more "fashionable" crop. He noted that Kansas is especially conducive to producing sorghum over corn. Several questions were asked by Committee members about how the irrigation water usage would be determined and the presenters noted various ways that the water would be distributed. The Committee members asked about the "use it or lose it" policy concerning water. This means to alleviate the penalization of those water users who conserve water on a regular basis was discussed.

STATUS UPDATES

Water Litigation

Chris Grunewald, Assistant Attorney General, Civil Litigation Division, Office of the Attorney General (Attachment 6), spoke about the court cases regarding water: Kansas v. Nebraska and Colorado, No. 126 Original (U.S. Sup. Ct.). Mr. Grunewald provided an update on recent activity regarding water litigation in 2011 and noted some major upcoming activities and deadlines pertaining to this ruling. The Special Master of the U.S. Supreme Court noted that he anticipates this issue going to trial.

Mr. Grunewald stated the state is incurring some of the litigation costs due to the U.S. Supreme Court case. He noted the case was very expensive to litigate, with an uncertain outcome. He noted the authority for groundwater use and management in Nebraska is delegated to the local level, it is somewhat more difficult to control the water usage of the groundwater as the state of Nebraska has very little authority.

Kansas Flint Hills Smoke Management Plan

Tom Gross, Air Monitoring and Planning Chief, Bureau of Air, Kansas Department of Health and Environment (Attachment 7), spoke on the update of the ozone standard, starting with the history of the process that began in 1997. He presented a chart showing the number of times the standard was exceeded from June through September 2011. Mr. Gross spoke about the site that is set up by Kansas State University to help determine a good day to burn based on the levels of particles in the air. He indicated a number of things the agency intends to do to continue to update the improvement of monitoring and forecasting using the meteorological data available to the agency.

EPA Regulations

Tom Gross, Air Monitoring and Planning Chief, Bureau of Air, Kansas Department of Health and Environment (Attachment 7), spoke about the Interstate Transport History, the regulations that were implemented, and the effects on the State of Kansas. He gave greater detail on the Cross-State Air Pollution final rule and the Ozone Season Supplemental Proposal. Mr. Gross then provided information about the SO_2 and NO_X trading programs and commented that KCP&L (Kansas City Power and Light) and Empire Direct Electric Company have some problems with the trading of SO_2 because Kansas and Missouri are in different trading areas. He commented that the new SO_2 standard of moving to a one hour standard changes the approach of monitoring and regulating the SO_2 emissions.

Mr. Gross stated the EPA (U.S. Environmental Protection Agency) has been asked by President Obama to back off the original request for emissions reductions, but the EPA has not made their final statement on the issue. He mentioned that the Kansas Department of Health and Environment is trying to keep up with all the rulings that are coming down from the EPA. Mr. Gross touched on the subject of monitors set up in the state to track the pollutants that are coming into the state from other areas, but the monitors cost a couple hundred thousand dollars to set up and the agency does not have enough funding for this purchase. Chairperson Holmes is aware of a list of five plants in Kansas that are scheduled for shut down due to the new regulations and they typically are the plants that help the electric grid function when there is a peak demand required by the consumer.

Abandoned Oil and Gas Well Plugging Program Overview

Doug Louis, Director, Conservation Division, Kansas Corporation Commission (Attachment 8), spoke about the two funds to which the Kansas Corporation Commission has access for abandoned well plugging. The first fund is the Abandoned Well and Site Remediation Fund for oil and gas wells drilled before 1996. This fund will sunset on June 30, 2016. Mr. Louis' data included the total funds used for well plugging, historically, as well as the forecast amount of funds available for 2012 through 2016. Additionally, he noted the number of wells plugged and the number of wells projected to be plugged each year through 2016. Mr. Louis stated that the focus of the abandoned well plugging activity is in the Chanute area where 7,546 out of 8,197 wells have been plugged since July 1996. The second fund that Mr. Louis discussed was the Well Plugging Assurance Fund, which was developed to plug wells drilled after 1996.

John McCannon, Assistant General Counsel, Conservation Division, Kansas Corporation Commission (Attachment 9), spoke about KSA 55-179, which governs the plugging of abandoned wells and identifies who is responsible for the costs of the well. He noted how the responsibility has evolved over time. Mr. McCannon discussed two court cases: the Donna Lee case and the Quest case. He explained how the agency determines who the responsible parties are for abandoned wells.

Mr. McCannon informed the Committee about a fund that was available for landowners to use to help offset some of their costs for capping abandoned wells. He noted the allocated money, to his knowledge, has never fully been used. He commented the agency does the best it can to identify the wells that are important to plug first, with the funds available. It was noted that the wells put in before 1996 are treated differently than those after that time as far as the responsibility of plugging the wells.

Pore Space Ownership

David Pierce, Professor of Law, Washburn University School of Law (Attachment 10), spoke about the ownership of "pore space." He explained the current Kansas legal principals regarding pore space ownership and the issues currently existing in the State of Kansas.

Professor Pierce noted if the state wanted to order a landowner to store carbon in the underground pores, the Legislature would have to specifically order eminent domain. Various scenarios of surface owner versus pore space owner were discussed. He commented if CO_2 was injected into the ground and, at some point in the future, damage occurred, the person who injected the CO_2 into the ground would be liable for the damage that was caused.

Hydraulic Fracturing

Edward Cross, President, Kansas Independent Oil and Gas Association (Attachments 11 and 12), spoke on hydraulic fracturing. He provided written testimony, as well as a PowerPoint presentation. Mr. Cross began his presentation with a video describing how hydraulic fracturing is executed. He noted the first U.S. hydraulic fracturing well was drilled in Kansas in 1947. A vast majority of wells in Kansas are fracked in order to extract oil and gas out of the ground that might otherwise not be available. He provided a website where one can find out more about the oil and gas industry: www.energyindepth.org. Additionally, Mr. Cross noted various studies done specifically by the EPA verify there is no damage done to the environment when hydraulic fracturing is used to extract oil and gas from underground. He noted the big issue is the ingredients of the fluid that is injected into the earth for hydraulic fracturing. He noted that no one in the industry is opposed to full disclosure of what is in the fluid used for fracking.

Doug Louis, Director, Conservation Division, Kansas Corporation Commission (Attachment 13), spoke about how the Kansas Corporation Commission regulates hydraulic fracturing. Mr. Louis reviewed how hydraulic fracturing works. He noted that the hydraulic fracturing in Kansas is different than the hydraulic fracturing that extracts oil and gas from the large reserves elsewhere in the country. He noted several websites to find out the specifics for wells that are drilled where companies have chosen to disclose the particular information about the wells and the chemical composition of the mix that is injected into the well.

Innovative Landfill Programs

Bill Bider, Director, Bureau of Waste Management, Kansas Department of Health and Environment (Attachment 14), spoke about the waste management systems in the State of Kansas. He showed charts mapping the movement of municipal solid waste through the state and also the various permitted solid waste facilities across the state. Mr. Bider noted that due to recycling, there is a gradual amount of decline in disposal per person per day in the state. He explained how single-stream recycling is working in Kansas primarily in South Central Kansas and Johnson County. He stated Kansas is diverting about 150,000 tons of material per year from landfills by using composting. Mr. Bider presented some specifics on the landfill gas recovery movement in Kansas. He spoke about the movement to overcome the "dry tomb" waste scenarios in order to promote landfill stabilization. He spoke about the direct combustion recovery of waste in Topeka (Frito Lay), Chanute (Ash Grove Cement), Fredonia (LaFarge Cement), and various alfalfa driers across the state. He spoke about a number of innovative waste management methods throughout Kansas. He also provided information on what has been done with the debris from the tornado that struck Joplin, Missouri, and Reading, Kansas.

Mr. Bider noted that asbestos from the tornado damage debris has been monitored as the waste is relocated. He explained there is a procedure called "wet burrito wrapping" used as the potential asbestos-contaminated buildings are being removed from the Joplin tornado area.

REGENTS UPDATE ON RESEARCH BEING CONDUCTED ON ENERGY, WATER, AND GENERAL SUSTAINABILITY

University of Kansas

Julie Goonewardene, Associate Vice-chancellor for Innovation and Entrepreneurship, University of Kansas (KU) (Attachment 15), introduced each member of the KU staff. She also concluded the University's presentation explaining that KU is moving toward expansion of its technology and research.

Natural Resources: Oil and Gas Exploration in Kansas

Rex Buchanan, Director, Kansas Geological Survey (Attachment 16), spoke about the Ogallala Aquifer and some of the issues the Kansas Geological Survey is doing to track and monitor local parts of the Aquifer. He included Public Information Circulars 18 and 27 on the high plains aquifer and geological sequestration of CO_2 in Kansas. Additionally, he included a brochure for legislators that explain the resources available from the Kansas Geological Survey about various survey issues.

Kansas NSF EPSCoR Project

Judy Wu, Distinguished Professor, Department of Physics, University of Kansas (Attachment 17), spoke about a joint university effort to focus on solar energy usage to produce electricity from solar cells, solar energy, and biomass. KU, together with Kansas State University and Wichita State University, will work to research and focus on increasing the use of solar energy and biomass to bio-fuel.

Tertiary Oil Recovery Project (TORP)

Jenn-Tai Liang and Corey Berkland, Professors, Department of Chemical and Petroleum Engineering (Attachment 18), spoke on the technology being developed to encapsulate the chemicals that are being used in oil and gas recovery while it is being transported to the desired area and then released. This technology also is being explored to be used in the cancer delivery process for cancer treatment in the medical field.

Carbonate Geology and Fossil Fuel Resources

Robert Goldstein, Distinguished Professor, Department of Geology, and Assistant Dean, College of Liberal Arts and Sciences (Attachment 19), spoke about the Kansas Interdisciplinary Carbonates Consortium (KICC) and the effects this research and training program will have on the next generation of scientists who eventually work for the oil and gas industry. He provided information on the research focus of the consortium of professionals and students gathered in this endeavor.

Kansas State University

Mary Rezac, Professor of Chemical Engineering and Co-Director of the K-State Center for Sustainable Energy (Attachment 20), spoke about the Center for Sustainable Energy and its potential impact on the energy and water resources. She spoke about bio-energy and the use of corn, sorghum, and switch grass to make ethanol. Professor Rezac talked about a few projects K-State is researching in order to determine the best bio-fuel production alternative mix that would yield the best use of various agriculture projects. She spoke briefly about wind and solar research. Additionally, Professor Rezac touched on the subject of water and its importance in the production of agriculture products.

It was noted, in regard to hydraulic fracturing, KU is working on chemicals that help carry the chemicals to the desired locations and then break down after the chemical is delivered.

Committee Discussion and Plan for Future Meetings

The Committee discussed various topics it would like to further explore at future meetings.

- Water
    - Sedimentation issues at the reservoirs in the state;
    - Stream-side erosion, especially at John Redmond Reservoir;

- Funding for acquiring reservoir storage capacities;
- Watershed districts;
- Benefit districts to prolong the water supply; and
- Water litigation and Prairie Dog Reservoir.

- Abandoned wells
  - Legislative Coordinating Council charge on this topic;
  - Tax incentive for property owner or operator to plug wells;
  - Explore the possibility of extending the incentive to the producer; and
  - Tax credits versus tax incentives.

- EPA regulations and smoke management
  - Research whether additional emissions are coming into the state from overseas or other states that are greatly increasing the measurement of the state's emissions.

- Pore space
  - Legislative discussion should take place on this issue; and
  - Further information about pore space is needed for the Committee members.

- Hydraulic fracturing
  - The Committee will take up this topic at the next meeting.

- Research programs
  - Provide more information on pyrolysis for Committee members; and
  - Provide a time frame for commercialization of environmental products for fracking.

- Topics from the Chairperson's letter to the Legislative Coordinating Council
  - An update on the Equus Beds Aquifer Project;
  - Guidance on new EPA regulations;
  - Energy efficiency and state weatherization program updates;
  - Flint Hills shield;
  - New wind farms in Kansas;
  - Discussion of the creation of a disaster fund for electrical co-operatives;
  - Electric rates for rural areas served by municipalities;
  - Review of the state energy emergency response plan;
  - Utilities perspective on the costs of complying with EPA regulations;

- Efficiency Kansas and the recent transfer of funding to the Department of Commerce;
- Compressed natural gas vehicles;
- An update on wind farms under construction in the state;
- Transmission update;
- Shutting down facilities due to EPA regulations and meeting energy projections; and
- Report from the Governor on wind in the Flint Hills and personal property issues.

Chairperson Holmes adjourned the meeting at 5:00 p.m.

Prepared by Renae Hansen
Edited by Heather O'Hara

Approved by the Committee on:

October 17, 2011
(Date)