# WATER ISSUES AFFECTING BPU ENERGY GENERATION

presented to:
State of Kansas

Joint Committee on Energy and Environmental Policy Meeting
2:00 pm, Tuesday, November 13, 2012
Kansas Statehouse Room 152-South

*by:*Joe Dick
Kansas City Board of Public Utilities

The Kansas City Board of Public Utilities (BPU) is a wholly-owned administrative agency of the Unified Government of Wyandotte County / Kansas City, Kansas. BPU provides a population of 150,000 Wyandotte County residents with electricity and drinking water. We operate about 67,000 electric meters and 55,000 water meters.

BPU and the Missouri River have co-existed together in Kansas City, Kansas, for more than 100 years. Although our relationship has been rocky at times (during floods, drought, and icing), this relationship is an important one. We rely on the usually dependable Missouri River to provide a wonderful natural resource for our power plants -- cooling water.

Cooling water, drawn in at the banks of the Missouri River through our intakes, is essential for efficient and cost effective electricity generation. BPU operates cooling water intakes at both of our power plants:

- Nearman Creek Power Station (River Mile: 378)
- Quindaro Power Station (River Mile: 373)

The amount of cooling water used in power production varies widely and depends on ambient air temperatures, river water temperatures, and energy demand. During 2011, BPU intakes drew in a combined total of 73.7 billion gallons of water from the Missouri River.

We are here today to briefly summarize six issues we are currently tracking or engaged in that affect BPU's relationship with the Missouri River and our ability to provide dependable, cost effective electricity:

# 1. Missouri River Bed Degradation

As the bottom of the Missouri River cuts deeper into its channel, especially in the Kansas City area, the river surface sinks lower. The lowered river levels have exposed or undermined many critical infrastructures such as bridge foundations; water, sewer, and natural gas pipelines; outfalls; and other structures. The bottom cutting problem is not limited to the Missouri River itself but gouges up its tributaries and undermines infrastructures there as well.

Joint Energy and Environmental Policy Committee November 19 and 20, 2012 Attachment: 7 BPU's stationary cooling water intakes are also affected and have become less efficient and at times unable to draw in water. Beginning in 2000, BPU has used temporary emergency pumps at both of its power plant intakes to ensure dependable cooling water. Permitted by the US Army Corps of Engineers, these temporary emergency pumps are placed down into the river directly in front of our intakes. The pumps are designed to push water up out of the river and into our intakes that in turn pump the cooling water up to the plant. As you can imagine, the "double handling" of the water is expensive and a safety concern especially during icing conditions.

# 2. Impending Changes to Wastewater Discharge Standards for Power Plants

The US Environmental Protection Agency has been developing new effluent discharge standards for the steam electric power industry. In 2010, USEPA completed an Information Collection Request (ICR) project that gathered information from power plants across the country and is now drafting new regulations that will probably require substantial new wastewater treatment investment.

BPU dedicated hundreds of man-hours responding to EPA's lengthy ICR. Although we don't expect to see the new proposed regulations until 2013 or 2014, we are expecting the additional requirements on coal-fired power generation to be significant.

# 3. New US Army Corps of Engineers "Study" to Investigate New Fees to Store Water in Upstream Missouri River Reservoirs

The US Army Corps of Engineers has just begun a study that will explore imposing new water storage fees on entities that draw water from the Missouri River and its reservoir systems.

BPU is tracking this newly emerging issue, but we can tell you we are very concerned about the possibility of paying a new "tax" to store the water that supports our intakes and our customers in upstream reservoirs.

## 4. "316(b)" - Fish Protection at Intakes

Section 316(b) of the Clean Water Act concerns fish protection at cooling water intakes. Recent 316(b) rule making will require substantial construction at power plant intakes to protect fish. We expect USEPA to publish its final rules on power plant intakes in 2013.

BPU is currently evaluating its options to comply with the regulations. So far, these options include either major intake reconstruction or switching from "once-through" river water systems to "full-time cooling tower" operations. Either way, compliance will be costly. (For example, operating the cooling tower sytems at Nearman Creek requires 3 Megawatts and an additional 2 Megawatts is lost due to thermal inefficiencies in the steam cooling cycle. These 5 Megawatts of power are unavailable to our customers and instead must be purchased off the power grid at much higher prices.)

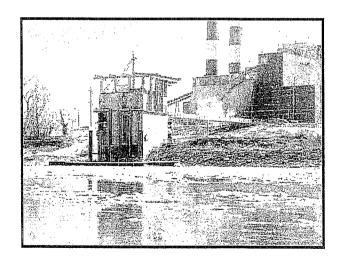
# 5. Tightening NPDES Thermal Discharge Requirements

BPU is currently working with the KDHE Bureau of Water to develop new NPDES permit limits for the thermal cooling water discharges from its power plants on the Missouri River. At this time we are exchanging information to model the impact of our discharges during different times of the year and changing power demands on the units.

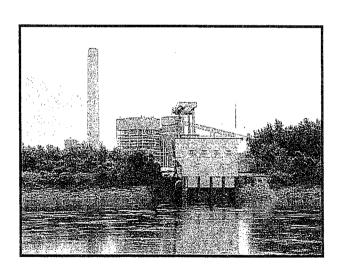
# 6. Zebra Mussels at Wyandotte County Lake

Two weeks ago we were informed that Zebra Mussels had been identified in Wyandotte County Lake. Zebra Mussels are a nuisance invasive species and known to be responsible for fouling and plugging intakes and pipes associated with power plant cooling systems. Wyandotte County Lake is only about three river miles upstream from BPU's Nearman Creek Power Station. The threat of a population of Zebra Mussels establishing itself in the Lake and continuously spawning a stream of larval mussels towards our power plants is a great concern for us. Although we have been monitoring for Zebras for more than a decade, it's clear they have finally arrived. Our next steps will be to increase surveillance, work with the Wyandotte County Parks Department on public communications, and work with KDHE on suitable options to disinfect our cooling water systems should the need arise.

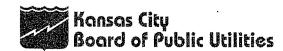
Collectively, nature and regulations are having major impacts on BPU's relationship with the Missouri River. Although BPU will continue to track the issues, clearly the uncertainties add more challenges and costs as we plan for the future power needs of our community.

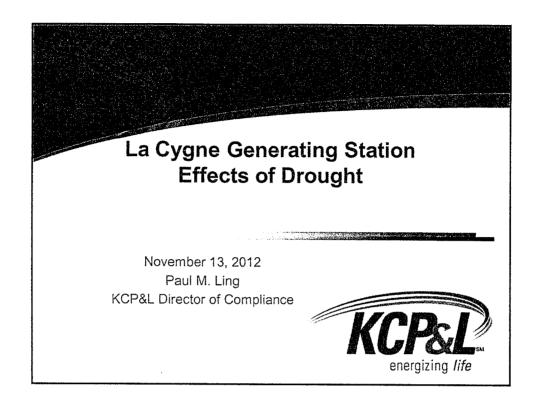


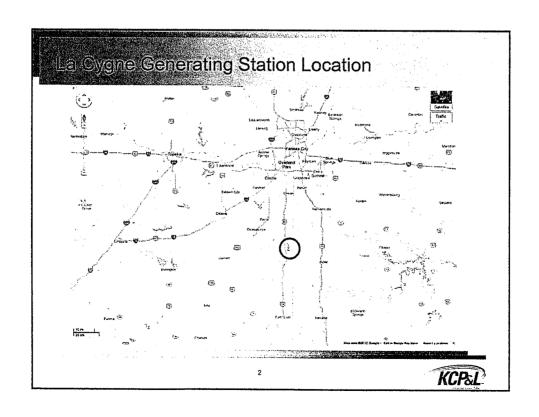
Quindaro Power Station Intake



Nearman Creek Power Station Intake







# Water Rights and Assurance Storage

- KCP&L has two senior water rights:
  - · All flows of North Sugar Creek, and
  - Marais des Cygnes River for make-up water (33,697 ac-ft annually).
- KCP&L has purchased assurance water storage in Melvern and Pomona Reservoirs.
- La Cygne Lake is designed to operate at 840' msl.
- Station operations are impacted when lake level drops to 838' msl.
- Pumped make-up water winter of 2011 and summer of 2012.
- KCP&L notifies Kansas Water Office (KWO) of any pumping operations.
- KCP&L requests assurance water from KWO when La Cygne gauge reads below 85 CFS, KWO coordinates with U.S. Army Corps of Engineers to release water, water takes 2-3 days to reach La Cygne.
- Stateline gauge is maintained at 20 CFS during drought conditions.

KCP&L

Connection Between La Cygne Lake and Assurance

Water

The state of th

# How much water?

- KCP&L has two 60 CFS rated pumps on river, currently can pump about 40-50 CFS about 79 ac-ft per day.
- Started pumping July 16, lake level was 839' and quickly dropping, very high electricity demand due to high temperatures.
- Pumped until October 15th. Lake level was helped in September due to rain events but lake level did not gain at all while pumps ran. Only maintained lake level. Pumped 92 days, stopped when Station went on planned outage.
- Approximately pumped 6,000 acre-feet total or 1.9 billion gallons, as of end of September.

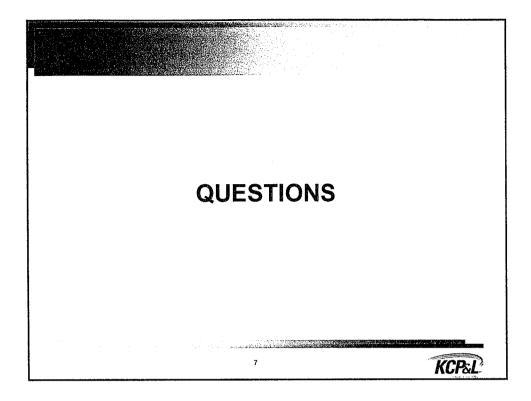


# Forecasi

- As of end of September (Kansas Water Office Accounting):
  - Melvern has 29% Industrial Storage (1667 ac-ft), 94% Reserve (24,361 ac-ft), 92% Water Marketing (13,616 ac-ft)
  - Pomona has 61% Industrial Storage (4,259 ac-ft), 92% Reserve (24,850 ac-ft), 92% Water Marketing (776 ac-ft)
- Current U.S. Army Corps of Engineers data (November):
  - Melvern 86% multi-purpose storage, 1033' msl
  - Pomona 82% multi-purpose storage, 971' msl
- Drought operations generally start at 75% of storage.
- Approximately 6000 ac-ft of combined industrial storage left for next year if drought continues without significant inflow.
- Additional storage may be available in water marketing or reserve pools.



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#### Senate Substitute for HOUSE BILL No. 2597

An ACT concerning oil and gas; amending K.S.A. 2011 Supp. 19-101a, 65-3407c and 79-4231 and repealing the existing sections.

Be it enacted by the Legislature of the State of Kansas:

Section 1. K.S.A. 2011 Supp. 65-3407c is hereby amended to read as follows: 65-3407c. (a) The secretary may authorize persons to carry out the following activities without a solid waste permit issued pursuant to K.S.A. 65-3407, and amendments thereto:

(1) Dispose of solid waste at a site where the waste has been accumulated or illegally dumped. Disposal of some or all such waste must be identified as an integral part of a site cleanup and closure plan submitted to the department by the person responsible for the site. No additional waste may be brought to the site following the department's approval of the site cleanup and closure plan.

(2) Perform temporary projects to remediate soils contaminated by organic constituents capable of being reduced in concentration by biodegradation processes or volatilization, or both. Soil to be treated may be generated on-site or off-site. A project operating plan and a site closure plan must be submitted to the department as part of the project approval

process.

(3) Dispose of demolition waste resulting from demolition of an entire building or structure if such waste is disposed of at, adjacent to or near the site where the building or structure was located. Prior to the department's authorization, written approval for the disposal must be obtained from the landowner and the local governmental or zoning authority having jurisdiction over the disposal site. The disposal area must be covered with a minimum of two feet of soil and seeded, rocked or paved. The final grades for the disposal site must be compatible with and not detract from the appearance of adjacent properties. In addition to the factors listed in subsection (b), the secretary shall consider the following when evaluating requests for off-site disposal of demolition waste:

(A) Public safety concerns associated with the building or structure

proposed to be demolished.

(B) Proposed plans to redevelop the building site which would be impacted by on-site disposal of debris.

(C) The disposal capacity of any nearby permitted landfill.

(4) Dispose of solid waste generated as a result of a transportation accident if such waste is disposed of on property adjacent to or near the accident site. Prior to the department's authorization, written approval for the disposal must be obtained from the landowner and the local governmental or zoning authority having jurisdiction over the disposal site. A closure plan must be submitted to the department as part of the authorization process.

(5) Dispose of whole unprocessed livestock carcasses on property at, adjacent or near where the animals died if: (A) Such animals died as a result of a natural disaster or their presence has created an emergency situation; and (B) proper procedures are followed to minimize threats to human health and the environment. Prior to the department's authorization, written approval for the disposal must be obtained from the landowner and the local governmental or zoning authority having jurisdiction

over the disposal site.

- (6) Dispose of solid waste resulting from natural disasters, such as storms, tornadoes, floods and fires, or other such emergencies, when a request for disposal is made by the local governmental authority having jurisdiction over the area. Authorization shall be granted by the department only when failure to act quickly could jeopardize human health or the environment. Prior to the department's authorization, written approval for the disposal must be obtained from the landowner and the local governmental or zoning authority having jurisdiction over the disposal site. The local governmental authority must agree to provide proper closure and postclosure maintenance of the disposal site as a condition of authorization.
- (7) Store solid waste resulting from natural disasters, such as storms, tomadoes, floods and fires, or other such emergencies, at temporary waste transfer sites, when a request for storage is made by the local governmental authority having jurisdiction over the area. Authorization shall be granted by the department only when failure to act quickly could jeopardize human health or the environment. Prior to the department's authorization, written approval for the storage must be obtained from the

landowner and the local governmental or zoning authority having jurisdiction over the storage site. The local governmental authority must agree to provide proper closure of the storage and transfer site as a condition of authorization.

(8) (A) Dispose of solid waste generated by drilling oil and gas wells by land-spreading in accordance with best management practices and maximum loading rates developed by the secretary and published on the department website.

(B) For any area that annually receives more than 25 inches of precipitation, as determined by the department, any solid waste disposed of by land-spreading shall be incorporated into the soil. No land-spreading shall occur on any area where the water table is less than 10 feet or on any area where there is documented groundwater contamination as determined by the department.

(C) (i) Each separate land-spreading location shall require submission of an application to land-spread drilling waste, complete with all information required on the application form developed by the secretary. The contents of the application form shall include, but are not limited to, the land-spreading location, soil characteristics, waste characteristics, waste volumes, drilling mud additives, land-spreading method and post-land-spreading report. A separate land-spreading application and a post-land-spreading report shall be submitted for each location.

(ii) For the purposes of protecting the health, safety and property of the people of the state, and preventing surface and subsurface water pollution and soil pollution detrimental to public health or to the plant, animal and aquatic life of the state, a land-spreading application may not be approved for the same location unless a minimum of three years has passed since the previous land spreading occurred.

(iii) A fee of \$250 shall be paid to the state corporation commission with each drilling waste land-spreading application. The fee shall be remitted to the state treasurer in accordance with K.S.A. 75-4215, and amendments thereto, to be credited to the conservation fee fund.

(D) The secretary and the state corporation commission shall enter into a memorandum of agreement for the purposes of:

Administering the land-spreading application and approval pro-(i) cess.

monitoring compliance; and

establishing mechanisms for enforcement and remedial actions. (iii)

On or before January 1, 2014, the secretary, in coordination with the state corporation commission, shall adopt rules and regulation governing land-spreading of waste generated by drilling oil and gas wells. In developing such rules and regulations, the secretary and the state cor-poration commission shall seek advice and comments from groundwater management districts and other groups or persons knowledgeable and experienced in areas related to this paragraph

(F) On or before January 30, 2013 and 2014, the state corporation commission shall present a report to the senate standing committees on natural resources and ways and means and to the house standing committees on agriculture and natural resources and appropriations. Such report shall include, but not be limited to, information concerning the implementation and status of land-spreading procedures and the costs associated with the regulation of land-spreading pursuant to this paragraph.

(G) The provisions of this paragraph shall expire on July 1, 2015.

- The secretary shall consider the following factors when determining eligibility for an exemption to the solid waste permitting requirements under this section:
  - (1) Potential impacts to human health and the environment.

Urgency to perform necessary work.

Costs and impacts of alternative waste handling methods.

Local land use restrictions. (4)

Financial resources of responsible parties. (5)Technical feasibility of proposed project.

Technical capabilities of persons performing proposed work. The secretary may seek counsel from local government officials prior to exempting activities from solid waste permitting requirements under this section.

# Out-of-state drill

Traditional drillers say with land-lease prices rising, state's rigs could be shut down in 2 years

#### The Associated Press

WICHITA - An influx of out-of-state horizontal oil drillers into Kansas is driving up land-lease prices so much that some traditional drillers say hundreds of the state's vertical wells could be idled within two years.

Oklahoma City-based Sandridge Energy moved its horizontal drilling operations into a few southern Kansas counties two years ago after buying up more than 2 million acres of mineral leases in Oklahoma and Kansas.

The company also has filed intent-todrill notices for more than 60 horizontal wells in Ford, Finney, Gray, Ness, Hodgeman and Gove counties in western Kan-ma and 200 in Kansas.

Out-of-state companies EnCana USA;

Tug Hill Operating and Apache Corp. all have drilled or filed intent-to-drill notices for dozens of horizontal wells in those same six to eight counties in central and western Kansas.

Cecil O'Brate, a vertical driller who owns American Warrior Energy in Garden City, said drillers liké him have another year or two before their existing leases expire! Many won't be able to renew because the out-of-state companies have driven up land-lease prices by 10 times or more, O'Brate said, estimating that in two years 30 percent of the state's drilling rigs will be

"It's a business," he said. "But they're screwing it up for the rest of us for years to come."

Sandridge senior vice president Kevin White said his company has 14 operating wells in the region that pump an average of about 200 barrels of oil or the equivalent in gas each day. Next year, the company a statistical play, a combination of good, intends to drill about 370 wells in Oklaho-

operations, said the company is finding a wells."

higher percentage of oil the farther north it drills, which is good because oil prices are high and case prices are low.

O'Brate said the horizontal drillers will discover as they drill in Hodgeman County and counties farther north and west that the Mississippian Limestone changes from thick and flat to thin and undulating, which makes it difficult to keep a drill bore in the formation for 4,000 feet.

While the geology of western Kansas is different from that of southern Kansas, adjustments could help drilling crews be successful there, said Lynn Watney, senior scientific fellow with the Kansas Geological Survey.

White, with Sandridge, said it is too early to say whether results in western Kansas will be similar to those in the southern part of the state. He said the results, on average, have been encouraging, but it is difficult to know for sure at this point.

"We've always said the Mississippian is average and bad wells," White said. "And we expect to see all of that. We don't expect Rick Kirby, Sandridge vice president of to focus in on one area with monster 4/1 mart 1

#### 12 11 14 NAS Power Grid Vulnerabilities

http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=12050



Date: Nov. 14, 2012

#### **FOR IMMEDIATE RELEASE**

Electric Power Grid 'Inherently Vulnerable' to Terrorist Attacks; Report Delayed in Classification Review, Will Be Updated

WASHINGTON — The U.S. electric power delivery system is vulnerable to terrorist attacks that could cause much more damage to the system than natural disasters such as Hurricane Sandy, blacking out large regions of the country for weeks or months and costing many billions of dollars, says a newly released report by the National Research Council.

According to the report, the security of the U.S. electric power system is in urgent need of attention. The power grid is inherently vulnerable physically because it is spread across hundreds of miles, and many key facilities are unguarded. This vulnerability is exacerbated by a reorganizational shift in the mid-1990s, prompted by federal legislation to introduce competition in bulk power across the country, resulting in the transmission network being used in ways for which it was not designed. As a result, many parts of the bulk high-voltage system are heavily stressed, leaving it especially at risk to multiple failures following an attack. Important pieces of equipment are decades old and lack improved technology for sensing and control that could help limit outages and their consequences — not only those caused by a terrorist attack but also in the event of natural disasters.

"Power system disruptions experienced to date in the United States, be they from natural disasters or malfunctions, have had immense economic impacts," said M. Granger Morgan, professor and head of the department of engineering and public policy at Carnegie Mellon University, Pittsburgh, and chair of the committee that wrote the report. "Considering that a systematically designed and executed terrorist attack could cause disruptions even more widespread and of longer duration, it is no stretch of the imagination to think that such attacks could produce damage costing hundreds of billions of dollars."

The report recommends ways to make the power delivery system less vulnerable to attacks, restore power faster after an attack or failure, and make critical social services less susceptible even if the delivery of conventional power is disrupted. The report stresses the importance of investment in power system research, and notes that the level of actual investment in this research is currently much smaller than it should be.

High-voltage transformers are of particular concern because they are vulnerable both from within and from outside the substations where they are located. These transformers are very large, difficult to move, often custom-built, and difficult to replace. Most are no longer made in the United States, and the delivery time for new ones could run from months to years. A promising solution, the report says, is to develop, manufacture, and stockpile a family of universal recovery transformers that would be smaller and easier to move. They would be less efficient than those normally operated and would only be for temporary use, but they could drastically reduce delays in restoring disabled electric power systems. In line with this recommendation, the U.S. Department of Homeland Security has recently cooperated with the U.S. power industry on the RecX program to develop and test a recovery transformer.

There are also critical systems -- communications, sensors, and controls -- that are potentially vulnerable to cyber attacks, whether through Internet connections or by direct penetration at remote sites. Any telecommunication link that is even partially outside the control of the system operators could be an insecure pathway into operations and a threat to the grid. Cyber security is best when connections with the outside world are eliminated, the report says. When interconnections are unavoidable, high-quality technical and managerial security systems should be in place, including systems that monitor for and help avoid operator error or intentional sabotage.

The report states that although it is not reasonable to expect federal support for all local and regional planning efforts, DHS and/or the U.S. Department of Energy should initiate and fund several model demonstration assessments across cities, counties, and states. These assessments should systematically examine a region's vulnerability to extended power outages and develop cost-effective strategies that can be adopted to reduce or eventually eliminate such vulnerabilities. Building on the results of these model assessments, DHS should develop, test, and disseminate guidelines and tools to assist other cities, counties, states, and regions to conduct their own assessments and develop plans to reduce vulnerabilities to extended power outages. To facilitate these activities, public policy and legal barriers to communication and collaborative planning will need to be addressed.

This report was completed by the National Research Council in the fall of 2007, but the sponsoring agency, the U.S. Department of Homeland Security, decided at that time that the report would be classified in its entirety. After a formal request from the Research Council for an updated security classification review, the report was cleared for public release in fall 2012. A foreword to the report, written by Ralph J. Cicerone, president of the National Academy of Sciences, and Charles M. Vest, president of the National Academy of Engineering, provides details about the delay and says that the key findings of the report remain "highly relevant." The foreword states:

"We regret the long delay in approving this report for public release. We understand the need to safeguard security information that may need to remain classified. But openness is also required to accelerate the progress with current technology and implementation of research and development of new technology to better protect the nation from terrorism and other threats."

Concurrent with the report's release to the public, a workshop is being planned to address changes that have occurred since the report's completion in 2007 and where future efforts should be directed to improve grid resilience.

The study was sponsored by the U.S. Department of Homeland Security. The National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council make up the National Academies. They are private, independent nonprofit institutions that provide science, technology, and health policy advice under a congressional charter. The Research Council is the principal operating agency of the National Academy of Sciences and the National Academy of Engineering. For more information, visit <a href="http://national-academies.org">http://national-academies.org</a>. A committee roster follows.

#### Contacts:

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# **EPA's Insanely Ambitious Agenda If Obama Is Reelected**

If you think the Obama administration's Enterprise Prevention Agenda has been wildly aggressive during the past four years, believe me, we really ain't seen nothin' yet. A new report released by the U.S. Senate Committee on Environment and Public Works Minority Committee enumerates a slew of planned EPA regulations that have been delayed or punted on until after the election that will destroy millions of American jobs and cause energy prices to skyrocket even more.

Titled "A Look Ahead to EPA Regulations for 2013: Numerous Obama EPA Rules Placed on Hold Until After the Election Spell Doom For Jobs and Economic Growth", it lists and describes new rules concocted over the past year ranging from additional restrictions on greenhouse gas emissions, tougher water guidelines and tightening of the ozone standard. Taken together, they will further drive up pump prices, impose construction bans on local communities, and cripple oil, natural gas and coal production.

As the Washington Post notes, the report puts a spotlight back on the Obama EPA which has earned a "reputation for Abuse", serving as a stark reminder that "President Obama has presided over a green team administration that works every day to "crucify" oil and gas companies and make sure that "...if you want to build a coal plant you got a big problem."

Ranking EPW Minority Committee member Senator James Inhofe (R-Okla.), observed that the reason why implementation of rule after rule has been delayed is because"...they don't want all those pink slips and price spikes to hit until after the election. But President Obama's former climate czar Carol Browner was very clear about what's in store for next year: she told several green groups not to worry because "President Obama has a big green 'to-do' list for 2013 so they'll get what they want."

And what is that list of green goodies? Let's take a look.

#### **Greenhouse Gas Regulations:**

Premised upon farcically flawed climate alarm conclusions pitched by the UN's Intergovernmental Panel on Climate Change which were even disavowed by EPA's own internal review of the matter, the agency is proposing the first source-specific emissions standards for new power plants which are so strict they will virtually eliminate coal as a fuel option for future electric power generation. While EPA has punted on standards for existing power plants as well as refineries — standards which will further drive up electricity and gasoline prices, once these regulations are in place, we can expect the agency to proceed under auspices of its Clean Air Act (CAA) to issue regulations, industry by industry, until virtually every aspect of the American economy is constrained by strict bureaucratic permitting requirements. These rules are projected to cost more than \$300 to \$400 billion a year, and will significantly raise the price of gas at the pump and energy in the home.

According to the EPW report, this ominous precedent can apply to small private entities as well, including churches, schools, restaurants, hospitals and farms. If this seems absurd, consider that under proposed federal permitting requirements, a farm whose aggregate emissions exceed CAA permitting thresholds would be required to comply with costly permitting mandates and pay an annual fee for each ton of greenhouse gas emitted on an annual basis. Known as the "cow tax", there would be a cost-per-animal outcome. EPA itself estimates that in its best case scenario, there will be over 37,000 farms and ranches subject to greenhouse gas permits... at an average cost of \$23,000 per permit annually... affecting over 90% of the livestock production in the United States.

#### Ozone Rule:

As reported in the *New York Times* last year, President Obama admitted that the "regulatory burdens and regulatory uncertainty" of tightening the ozone standard would harm jobs and the economy ... but he still pointed to the fact that it will be reconsidered in 2013. EPA itself estimated that this would cost \$90 billion a year, while other studies have projected that the rule could cost upwards of a trillion dollars and destroy 7.4 million jobs.

By EPA's own projections, it could put 650 additional counties into the category of "non-attainment," which is the equivalent of posting a "closed for business" sign on communities. Affected counties will suffer from severe EPA-imposed restrictions on job creation and business expansion, including large numbers of plant closures.

The *Times* concluded: "The full retreat on the smog standard was the first and most important environmental decision of the presidential campaign season that is now fully underway. An examination of that decision, based on interviews with lobbyists on both sides, former officials and policy makers at the upper reaches of the White House and the E.P.A., illustrates the new calculus on political and policy shifts as the White House sharpens its focus on the president's reelection."

## Hydraulic Fracturing:

Under the Obama administration the EPA is but one of fourteen different federal agencies that are working to find ways to regulate hydraulic fracturing in order to limit and eventually stop the practice altogether. Others include the Department of Energy (DOE), the Bureau of Land Management (BLM), the Center for Disease Control (CDC), the Department of Agriculture (USDA), and even the Securities and Exchange Commission (SEC). The BLM, under Secretary Salazar's control, will be finalizing new regulations sometime after the election.

The EPW report warns that the Obama Administration's anti-hydraulic fracturing agenda doesn't stop there. In the months following the election, we can expect the EPA alone to: issue guidance for the usage of diesel fuels during hydraulic fracturing, which will strip states of the primacy granted to them through the Safe Drinking Water Act; complete a study ... highly criticized and unsupported by multiple state and federal agencies ... desperately attempting to link hydraulic fracturing to water contamination in Pavillion, WY; answer countless petitions filed by radical environmental organizations potentially leading to the back-door regulation of hydraulic fracturing through the Toxic Substances Control Act, Resource Conservation and Recovery Act, and Clean Air Act; and potentially introduce Effluent Limitations Guidelines for both shale gas extraction and coal-bed methane.

#### Water Guidance:

EPA's proposed new guidance document for waters covered by the Clean Water Act (CWA), proposed in April 2011, reinterprets recent Supreme Court decisions to allow EPA to expand federal control over virtually every body of water in the United States, no matter how small. EPA's own analysis of the document estimated that up to 17% of current non-jurisdictional determinations would be considered jurisdictional using the new guidance.

Further, the guidance applies to the entire CWA, which will result in additional regulatory responsibilities for states. This dramatic expansion has received tremendous push-back from the regulated community, states, and municipalities who do not want to have extensive new federal authorities and the costs associated with additional CWA compliance pushed through in guidance. As *Inside EPA* reported in the spring of 2012, the guidance looks to be delayed until after the election. This guidance, much like greenhouse gas regulations, failed to pass as legislation when Democrats enjoyed overwhelming majorities in the House and the Senate.

#### Storm-water Regulations:

In 2009, EPA announced, as part of the Chesapeake Bay Settlement Agreement, that the agency would propose new nationwide storm-water rules by September 2010, with final action by November 2012. EPA's advanced notice of proposed rule-making plans to: expand the universe of federally regulated storm-water; establish a first-time standard for post-construction storm-water runoff; require first-time retrofit requirements on storm-water systems ... which could include mandates on cities to change existing buildings, storm-water sewers, and streets; and mandate the use of "green"

infrastructure" techniques (like "green roofs," rain gardens, permeable pavement) to replace conventional storm-water management practices.

All this will put enormous cost burdens on states and municipalities and on anyone who owns or wants to develop property. If the final rule does everything EPA has proposed, it could be the most expensive rule in EPA history. According to EPA's website, the proposal has been punted until June 2013, and the final rule is due in December 2014.

#### Tier III Gas Regulations:

EPA is preparing to propose a rule-making called Tier III, which reduces the content of sulfur in gasoline from 30 ppm to 10 ppm. The cost of this rule could be up to \$10 billion initially and \$2.4 billion annually, and it could add up to 9 cents per gallon in manufacturing costs. These costs would inevitably be passed on to consumers at the pump. Many, including those on the far left, believe that political motives have caused President Obama to delay this rule until after the election.

#### **Boiler MACT Rule:**

EPA's Boiler MACT (Maximum Achievable Control Technology) standards are so strict that not even the best-performing sources can meet them, so many companies will have no choice but to shut their doors and ship manufacturing jobs overseas. The rule has been projected to reduce U.S. GDP by as much as 1.2 billion dollars and destroy nearly 800,000 jobs.

Because of bipartisan Congressional opposition to the standards, the agency is now reconsidering certain aspects of the rule. In what can only be seen as another politically- calculated move, the new rule is now being held by the White House, presumably until after the election. Not only is this creating uncertainty among the regulated community, it is also fueling speculation that very few changes have been made to the rule, and that the White House would prefer that it not be made public until after the election.

#### **Cement MACT Rule:**

EPA's Cement MACT rule could cause 18 plants to shut down, throwing up to 80,000 people out of work. As more and more cement has to be imported from China, concrete costs for the construction of roads, bridges, and buildings that use cement could increase 22% to 36%. As with Boiler MACT, due to Congressional opposition, EPA is now reconsidering certain aspects of the rule, which will not be seen until after the election.

#### 316(b) Cooling Towers Rule:

EPA is planning to require the use of strict protections for fish in cooling reservoirs for power plants under the CWA. EPA's own estimates put the draft rule costs between \$384 million and \$460 million per year, with benefits of just \$17 million – a cost benefit gap of more than 22 to 1.

As the Washington Guardian noted about the delay, "In its latest election-year delay of regulations, the Obama administration said Tuesday it will defer until next year acting on a Clean Water Act rule that could require expensive new construction at power plants to lower fish deaths. The postponement by the Environmental Protection Agency was not unexpected, with the agency having only recently completed a public comment period on its latest data. Still, the move to add another 11 months to the rule-making marks the latest step by the administration to delay potentially controversial environmental rules until after the November election."

#### Coal Ash Rule:

EPA's proposed coal ash rule could cost \$79 to \$110 billion over 20 years, destroying 183,900 to 316,000 jobs; this will have disastrous impacts in states like Pennsylvania, West Virginia, Ohio and Missouri. As the <u>Charleston Gazette</u> reported, "Despite initial tough talk on the issue, [EPA administrator Lisa] <u>Jackson</u> issued a regulatory proposal that did not settle on a particular strategy."

Politico also noted, "EPA is sitting on proposed regulations to declare coal ash to be a hazardous substance...Administrator Lisa Jackson has said the agency will issue a final coal ash rule by the end of the year, but environmentalists and coal ash recyclers aren't convinced."

#### Farm Dust Regulations:

EPA has been regulating farm dust for decades and may tighten the standards as part its review of the National Ambient Air Quality Standards (NAAQS) for coarse particulate matter (PM10). Tightening the PM10 NAAQS would have widespread implications for rural America, as it could be below the amount of dust created during normal farming operations, and therefore be impossible to meet.

If the standard is tightened, the only option for farmers to comply will be to curb every-day farm activities, which could mean cutting down on numbers of livestock or the tilling of fields, or they may have to shrink or even end their businesses altogether.

## Spill Prevention Control and Countermeasure (SPCC) Rule:

EPA's Spill Prevention Control and Countermeasure (SPCC) Rule would require farmers and ranchers to develop and implement costly oil and gasoline spill prevention plans, placing a tremendous burden on the agricultural community. The original deadline was set for November 2011, but the rule was delayed due to pressure from Congress. EPA set a new SPCC deadline of May 10, 2013.

And That's Only The Beginning....

We can bet that lots of other undisclosed regulatory schemes exist, and that more costly EPA overreach plans will continue to be hatched so long as voters allow this to continue. As noted by H. Sterling Burnett, a senior fellow at the National Center for <u>Policy</u> Analysis (NCPA): "The EPA is in the process of codifying a whole slate of new air quality rules, the sheer number and economic impact of which have not been seen at any time in the EPA's history." Burnett predicts that this will put millions more people out of work by 2020, shrink local tax bases as businesses cut staff or relocate, and force many more cities and counties into bankruptcy.

The American Council for Capital Formation estimates that the new EPA regulations already in place will result in 476,000 to 1,400,000 lost jobs by the end of 2014. Management Information Services, Inc. foresees that up to 2.5 million jobs will be sacrificed, annual household income could decrease by \$1,200, and gasoline and residential electricity prices may increase 50% by 2030. The Heritage Foundation projects that the greenhouse gas regulations will cost nearly \$7 trillion (2008 dollars) in economic output by 2029.

According to the annual "Regulator's Budget" compiled last year by George Washington University and Washington University in St. Louis, the employment of federal government regulators has climbed 13% since Obama took office, while private sector jobs shrank by 5.6%. In fact, if the federal government's regulatory operations were a business, their \$54 billion budget would make them one of the 50 the largest in the country... bigger than McDonald's, Ford, Disney and Boeing combined. It's high time we voters issued pink slips to those responsible for mismanaging that bloated enterprise.